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May 1, 2017

Mr. Craig Thomas
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**Subject: Revised Draft Assessment Report
Intermet/Wagner Castings Site
USEPA Contract No. EP-S5-13-01
Technical Direction Document No. S05-0001-1606-403
Document Tracking No. 1640**

Dear Mr. Thomas:

Tetra Tech Inc. (Tetra Tech) is submitting the revised draft Assessment Report for the Intermet/Wagner Castings site in Decatur, Illinois for your review and comment. This report summarizes the assessment and removal action activities conducted at the site from September 6 through November 10, 2016. Tetra Tech also addressed your comments on the draft Assessment Report received on April 25, 2017. If you have any questions regarding this report, please call me at (312) 201-7759. This report will be finalized in 30 days if no comments are received by USEPA.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Cordell Renner'.

Cordell Renner
Project Manager

Enclosure

cc: Kevin Scott, Tetra Tech Program Manager
TDD File

**DRAFT ASSESSMENT REPORT
INTERMET/WAGNER CASTINGS SITE
DECATUR, MACON COUNTY, ILLINOIS**

REVISION 1

Prepared for

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1.0 INTRODUCTION

The U.S. Environmental Protection Agency (USEPA) tasked Tetra Tech Inc. (Tetra Tech), to provide technical support at the fund lead removal action at the Internet/Wagner Castings Site in Decatur, Macon County, Illinois. The work was assigned under Superfund Technical Assessment and Response Team (START) Contract EP-S5-13-01, Technical Direction Document (TDD) No. S05-0001-1606-403.

USEPA tasked Tetra Tech to perform the following activities:

- Analyze the nature, amount, and location of hazardous materials.
- Analyze the potential risk to human health and the environment posed by the potential release of hazardous substances, pollutants, and discharge of oil.
- Prepare a sampling plan which describes the number, type, location, and type of analysis for samples.
- Monitor work of other federal contractors.
- Coordinate with and assist other federal contractors.
- Review completeness of disposal documentation, such as manifests, waste profile data, and other information.
- Monitor and measure environmental conditions on a real-time basis using qualitative and quantitative instruments.
- Identify the extent of contamination.
- Monitor for health and safety compliance.
- Conduct on-site environmental sampling activities.

These activities were performed as part of a USEPA fund lead removal action conducted at the site from October 6, 2016 through November 10, 2016. The purpose of the fund lead removal action was to mitigate threats to public health and the environment posed by the presence of uncontrolled hazardous substances at the site. These mitigation actions included asbestos abatement, drum characterization and disposal, and disposal of polychlorinated biphenyl (PCB) and non-PCB transformer oil and transformers. In addition, the USEPA requested that START conduct air monitoring during removal activities to ensure the safety of on-site workers and to ensure that off-site migration of fugitive emissions from the removal did not adversely affect neighboring residential and commercial areas. Work was performed by START and Emergency Rapid Response Services (ERRS) under the direction of the USEPA.

This report discusses the site description and site background in Section 2.0, describes assessment activities in Section 3.0, provides a summary of removal action activities in Section 4.0, lists future activities in Section 5.0, and includes references in Section 6.0.

Site Figures 1 through 5 are provided in Appendix A; data summary tables are provided in Appendix B; field notes recorded by START are provided as Appendix C; photographic documentation is provided in Appendix D; sample chain of custody records are included in Appendix E; and environmentally preferred practices used at the site are provided in Appendix F.

2.0 SITE BACKGROUND

This section describes the site and previous investigations conducted at the site.

2.1 SITE LOCATION

The Internet/Wagner Site (Site) is an industrial property located at multiple street addresses including 700 North Jasper, 825 North Lowber Street, and 1275 Sangamon Street in Decatur (Figure 1 in Appendix A). The geographic positioning coordinates for the approximate center of the site are 39.849203° north latitude and 88.938987° west longitude. The western two-thirds of the site have been dedicated to industrial manufacturing (foundry operations) since the early 1890s. The eastern third of the current site was residential until 1945, when the owner expanded foundry operations onto that portion of the site (Gannett 2010).

2.2 SITE DESCRIPTION

The foundry covers approximately 30 acres, and there are seven buildings on the site. Figure 2 in Appendix A presents an aerial photograph of the site and labels general site features. The site is surrounded to the east, south, and west by heavy industrial activity, primarily railroad yards and related facilities. The area north of the site is residential.

Hazardous materials and chemicals of concern (COCs) on site included asbestos containing materials (ACM), polychlorinated biphenyls (PCBs), mercury, foundry sand, and unknown chemicals in drums, above ground storage tanks (ASTs) containing fuel oil, and a closed drain in the foundation of a former plating facility that was part of the foundry operations.

2.3 SITE OWNERSHIP HISTORY

Wagner Castings Company (Wagner Castings) operated a foundry on the site from 1917 until 1979, when foundry operations were taken over by Chambers, Behring, and Quinlen Gray Iron Foundry (Gray). Internet Corporation (Internet) acquired the site in 2001. Internet manufactured ductile and malleable iron components, primarily for the automotive industry. Internet filed bankruptcy in 2004 and ceased operations in 2005. Vieweg Real Estate (Vieweg) purchased the property in 2010 and is the current owner (Gannett 2010).

2.4 PREVIOUS INVESTIGATIONS

In July and August 1992, Eder Associates (Gannett Fleming) conducted a limited subsurface soil and groundwater investigation to determine whether past operations at the site had adversely affected soil or

groundwater. Twenty-one soil borings (WB-1 to WB-10, B-11 to B-17, and MW-1 to MW-4) were drilled, and monitoring wells were installed at four of the soil boring locations. Soil samples collected from areas identified as storing petroleum products were analyzed for total petroleum hydrocarbons (TPH) and/or BTEX compounds (benzene, toluene, ethylbenzene, and xylene). The results of the 1992 investigation identified two portions of the property where impacts of petroleum products had occurred.

Soil samples were analyzed for toxicity characteristics leaching procedure (TCLP) characteristics of metals and semi-volatile organic compounds (SVOCs). All TCLP parameters were below Section 721 TCLP regulatory levels.

Gray Iron Foundry retained Residuals Management Technology, Inc. (RMT) which submitted several unsuccessful requests to the Illinois Environmental Protection Agency (IEPA) for a No Further Remediation (NFR) letter under the agency's Tiered Approach to Corrective Action (TACO) rule. RMT's July 17, 1997, report to IEPA requested an NFR letter for Areas 1, 2, 3, 4, and 5. RMT's report to IEPA contained only information collected by Gannett Fleming; RMT did not conduct any investigative activities. The site entered IEPA's Site Remediation Program (SRP) on March 7, 1997. In 2001, Internet purchased the facility, and the Site remained in the SRP.

In 2002, Internet met with the IEPA and was told that additional data were needed to support the NFR request. Additional investigative field work by Gannett Fleming included 12 additional Geoprobe borings and installation of 7 additional monitoring wells. Two site investigation reports, one dated April 8, 2003, for the field work completed in 2002, and the other dated December 24, 2003, for the field work completed in 2003, were submitted by Gannett Fleming to the IEPA on behalf of Internet.

The most significant finding was the presence of free product in MW-1, located adjacent to the three quench oil ASTs. The product was lab analyzed, and it was identified as likely degraded fuel oil/diesel, not quench oil.

Bail-down tests done in November 2002 showed that the hydraulic conductivity of the shallow aquifer was 9.55×10^{-5} cm/sec. This low hydraulic conductivity allowed the use of Section 742 Tier 1 Class II Groundwater Remediation Objectives (GROs) for the Site. The IEPA approved Class II GROs for the site in a letter to Internet dated April 29, 2003.

In June 2004, Internet retained Bodine Environmental Services of Decatur, and they submitted a work plan to the IEPA that was approved on October 15, 2004. The IEPA issued a Notice of Violation in April 2005 stating that the facility had withdrawn from the SRP program and alleged certain violations at the

facility. Subsequent correspondence and meetings between Internet, Bodine, and the IEPA led to the development of a Compliance Commitment Agreement (CCA). Internet entered into a CCA with the IEPA on August 14, 2005. The CCA contained an accelerated schedule for investigation and remediation of the Site. Due to several factors, including the discovery of wells with free product and Internet's bankruptcy, it was not possible to keep the schedule.

Recovery of free product from on-site wells continued through 2007. Data provided by Gannett Fleming showed that by January 2008, very limited amounts of free product were still present in three wells. The estimated thickness of product in these wells ranged from 0.03 to 0.31 feet. The corrected thicknesses of product in these wells ranged from 0.01 to 0.06 feet.

In 2007, Gannett Fleming was retained by 825 North Lowber LLC to assist them in obtaining an NFR determination from IEPA. Gannett Fleming prepared a work plan that was approved by the IEPA on May 26, 2009.

Gannett Fleming collected groundwater samples from all site wells on May 27 as well as July 29 and 30, 2009. The samples were analyzed for total metals (not filtered), volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), and SVOCs. Samples collected from MW-6 and MW-11 contained four metals above Tier 1, Class II GROs. The only VOC, PAH, or SVOC results above a Tier 1, Class II GRO was pentachlorophenol in monitoring well MW-2. (Gannett, 2010)

In July 2014, the IEPA Office of Site Evaluation collected samples from the site. Analytical results from their sample collection activities documented the presence of PCBs (Aroclor 1242) in a drum at a concentration of 2,800,000 parts per million (ppm), and ACM identified in multiple samples collected from Galbestos found coating metal panels on one of the buildings at the site. (IEPA, 2014)

In June 2016, the Internet/ Wagner Castings Site was referred to USEPA in order to remove potentially hazardous material remaining on site. USEPA decided to conduct a removal assessment and action concurrently based on the information provided above. This was completed by collecting samples and analyzing data as removal actions were completed throughout the site in differing areas.

3.0 ASSESSMENT ACTIVITIES

The TDD was received by START on June 22, 2016. A site visit was conducted by the USEPA, START, IEPA, and Vieweg on August 26, 2016. From September 6 to September 13, 2016, USEPA and START conducted the removal assessment activities. USEPA On-Scene Coordinator (OSC) Craig Thomas was the primary site contact. As part of the removal assessment activities, Tetra Tech developed a sampling and analysis plan (SAP) dated September 8, 2016 (Tetra Tech 2016a). The SAP identifies site-related contaminants of concern, sampling procedures, air monitoring equipment, and techniques. This section describes indoor air and radiation assessment activities; collection of foundry sand, soil, wipe, bulk oil, solid, and drain samples; sampling unknown drums and above ground storage tanks (ASTs); and asbestos inspection and bulk asbestos sampling. Field activities were logged in the field log books and photographed, field notes can be found in Appendix C and the photo log can be found in Appendix D.

3.1 INDOOR AIR AND RADIATION ASSESSMENT

On September 6, 2016, START conducted an indoor air and radiation assessment in accordance with the SAP. The buildings where the assessment was conducted included the three Galbestos sided buildings, and the drum/waste storage building (Figure 2 in Appendix A). The assessment included screening for radiation, radiation sources, mercury vapors, mercury vapor sources, and VOCs.

3.1.1 Radiation Assessment

START performed a radiation screening assessment using a Ludlum gamma radiation survey meter, Model 192 (Ludlum) in areas where high volumes of foundry sand were moved and processed on site. These areas included the former sand storage tank in the southwest corner of the site, and the former baghouse and baghouse stock pile location at the southeast corner of the site. Before performing the radiation assessment, START collected background radiation levels from five off-site points with the Ludlum and averaging the observed levels. No elevated radiation levels above background levels were detected during the radiation assessment.

3.1.2 Mercury Vapor Screening

START screened the indoor air, inside perimeter, and electrical boxes of all of the on-site building using an Ohio Lumex Mercury Analyzer, Model RA-915+ (Lumex). Mercury vapor readings were not detected above 10 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) in the buildings located on the west end of the site.

On September 8, 2016, elemental mercury beads were discovered in the former locker room and shower facility located in the northwest portion of the site. On September 9, 2016, START conducted a mercury

assessment of the locker room and shower facility, as well as the engineering building and corporate office building adjacent to the facility (Figure 3 in Appendix A). Due to the observation of mercury beads, the mercury assessment was conducted in Level C PPE. The mercury assessment in the engineering building and corporate office building was conducted wearing Tyvek booties to prevent tracking possible mercury out of the building.

Using the Lumex, START detected levels of mercury vapor greater than $50 \mu\text{g}/\text{m}^3$ in the break room of the locker room and shower facility. The Agency for Toxic Substances and Disease Registry (ATSDR) industrial action level for mercury is $10 \mu\text{g}/\text{m}^3$. If levels are observed above $25 \mu\text{g}/\text{m}^3$ then respirators with CL/MV/P100 cartridges will be required for entry. Elemental mercury was also observed in the break room during the assessment. The source of the elemental mercury was discovered to be two Type S Tank-O-Meters located adjacent to the elemental mercury.

3.1.3 PID Screening

On September 6, 2016, START used a RAE Systems MultiRAE 5-gas monitor (equipped with sensors for detection of oxygen, carbon monoxide, hydrogen sulfide, percent lower explosive limit [LEL], and VOCs) to field-screen for VOCs, oxygen level, carbon monoxide, hydrogen sulfide, and LEL, in areas potentially impacted by PCB oil containing vessels and unknown drums at the site. The breathing zone of the buildings located inside the site boundaries were screened in accordance with the site SAP. Measurements on the MultiRAE remained at background levels during the screening.

3.2 SAMPLE COLLECTION

This section describes the sample collection at the Site. All samples were collected in accordance with the final SAP (Tetra Tech 2016a). Samples were sent to CT Laboratories in Baraboo, WI under chain of custody. Chain of custody forms for all samples are included in Appendix E. A summary of the samples collected during the assessment is presented below.

Sample Summary Table

Samples Type	Number of Samples Collected	Analysis
Foundry Sand	4	TCLP Metals
Surface Soil	17	TCLP Metals, TCLP VOCs, TCLP SVOCs, PCBs, Pesticides / Herbicides
Bub-surface Soil Sample	1	TCLP Metals, TCLP VOCs, TCLP SVOCs, PCBs, Pesticides / Herbicides
Wipe Samples	23	PCBs
Bulk Oil	1	PCBs
Solid Samples	2	TCLP metals, TCLP VOCs, TCLP SVOCs, PCBs, Reactivity, Corrosivity, and Ignitability.
Unknown Drum	3	PCBs, SVOCs, VOCs, Metals, pH, and Flashpoint
AST Samples	3	PCBs, SVOCs, VOCs, Metals, pH, and Flashpoint
Drain Sample	1	reactivity, corrosivity, ignitability, full TCLP analyses, and cyanide
Asbestos	15	Percent asbestos

3.2.1 Foundry Sand Sampling

On September 7, 2016, START collected four samples (IW-FS-01 to 03), including one duplicate, of foundry sand. Samples were collected from the Drum/Waste Storage Building, near the northeast corner of the site, and from discarded sock bags near the center of the site of the site. START collected an additional foundry sand sample (IW-FS-04) on September 13, 2016. The sample was collected from a foundry sand pile 50 yards southwest of the former plating facility. (Figure 3 in Appendix A)

Samples were analyzed for toxicity characteristic leaching procedure (TCLP) metals.

3.2.2 Soil Sampling

On September 7, 2016, START collected 17 surface soil samples (IW-SS-01 through IW-SS-14), including three duplicates. Thirteen samples, including two duplicates, were collected around the perimeter of two Galbestos sided buildings near the southwestern corner of the site. These samples were analyzed for PCBs by USEPA method 8082A. Four samples, including one duplicate, were collected from the area surrounding the former saddle tank fields located on the eastern portion of the property and were analyzed for TCLP metals, TCLP VOCs, TCLP SVOCs, Pesticides/herbicides, and PCBs for waste characterization (Figure 3 in Appendix A).

On September 9, 2016, START collected two additional surface soil samples, IW-SS-15 and IW-SS-16 (Figure 3 in Appendix A). Sample IW-SS-15 was collected from impacted soil near a leaking transformer, and was analyzed for PCBs. Sample IW-SS-16 was analyzed for TCLP metals, TCLP VOCs, TCLP SVOCs, Pesticides/herbicides, and PCBs for waste characterization.

3.2.3 Wipe Sampling

On September 7, 2016, START collected a total of 24 PCB wipe samples (IW-WO-01 through IW-WO-21), including three duplicate samples from areas suspected to contain PCB contamination. START collected 16 samples around the perimeter of two Galbestos-sided buildings near the southwestern corner of the site. Eight samples, including three duplicates, were collected from inside of the structures at the west end of the site. Samples IW-WO-20 and IW-WO-21 were collected from stained areas near PCB containing transformers (Figure 3 in Appendix A). All PCB wipe samples were collected over a 100 cm² area and analyzed for PCBs.

Two additional wipe samples (IW-WO-22 and 23) were collected from the same location as IW-WO-20 and 21, respectively. Wipe samples 22 and 23 were collected on October 20, 2016, after the transformers had been removed and the staining cleaned to determine the efficacy of the cleaning.

3.2.4 Bulk Oil Sampling

On September 7, 2016, START collected one bulk oil sample from an open steel 55 gallon drum with a leaking transformer staged within it (Figure 3 in Appendix A). The bulk oil sample was analyzed for PCBs.

3.2.5 Solid Sampling

On September 7, 2016, START collected a solid sample (IW-SO-01) of an observed green solid material found on the floor and in bags placed on top of pallets in the drum/waste storage facility (Figure 3 in Appendix A). IW-SO-01 was analyzed for TCLP metals by USEPA method 6010C.

On September 8, 2016 a second solid sample (IW-SO-02) was collected from a mix of oil dry and oil in the drum/waste storage facility. IW-SO-02 was analyzed for TCLP metals, TCLP VOCs, TCLP SVOCs, PCBs, Reactivity, Corrosivity, and Ignitability.

3.2.6 Unknown Drum Sampling

On September 8, 2016, START collected a total of three samples from unknown drums located in the drum waste storage building. Prior to sampling, each drum was visually inspected for pressurization (bulging/dimples), leaks, overall drum condition, and sampling accessibility. A total of 12 drums were staged in the waste storage facility where they were then inventoried and marked with a waterproof grease pen to identify numerical order found. The drum identification numbers were then used as the IDs for sample collection and laboratory analysis. START utilized a MultiRAE to field-screen each drum during the entire opening process to monitor for toxic vapors and the lower explosive limit (LEL) to ensure a non-explosive environment within the drum. START dressed in Level B PPE to screen each drum.

Samples were collected from drums IW-DR-02, IW-DR-06, and IW-DR-09 using drum thieves due to elevated vapor readings while opening those drums. The remaining drums did not register significant toxic vapor readings. The drums were sampled for PCBs, SVOCs, VOCs, Metals, pH, and Flashpoint.

3.2.7 AST Sampling

On September 8, 2016, START collected three samples (IW-AST-01 to 03) from three out of four known ASTs located on site (Figure 3 in Appendix A). Liquid was present in the three of the four ASTs, and was sampled using a bailer. Each AST was opened and screened with a MultiRAE prior to sampling. No vapors were detected above action levels. AST samples were analyzed for PCBs, SVOCs, VOCs, Metals, pH, and Flashpoint.

3.2.8 Drain Sampling

On September 12, 2016, START collected a solid sample from a former drain line. A former electroplating drain line was observed in the former plating building onsite. The line was plugged with a cement cap, and had the potential to be contaminated as a result of the plating facility. The cement plug in the drain line was removed, and START collected a sample from the contents of the line. The sample was analyzed for waste reactivity, corrosivity, ignitability, full TCLP analyses, and cyanide.

3.2.9 ACM Inspection and Sampling

Based on the age and condition of the debris piles and buildings on site, OSC Thomas requested that Tetra Tech conduct a visual asbestos inspection of the site before removal activities began. On September 6, 2016, Tetra Tech conducted a visual inspection of the debris piles and buildings on site in Level C PPE to identify any potentially asbestos containing materials (ACMs). Tetra Tech identified potential ACMs in the debris piles (Figure 5 in Appendix A) and in an office building (Figure 4 in Appendix A) at the east end of the site during the visual inspection.

START collected 15 bulk asbestos samples on September 6 and 30, 2016. Bulk material sampled included tile, mastic, roofing paper, flooring, drywall, sheet rock, ceiling tile, and pipe insulation. Out of the 15 samples collected, 7 samples were from the ACM debris piles (IW-BA-01 to 07), 7 were from the office building (IW-BA-08 to 14), and 1 was from a fire brick pit (IW-BA-15) (Figures 3 and 4 in Appendix A).

3.3 SAMPLE RESULTS

Sample results are described in Sections 3.3.1 through 3.3.9 and presented in Tables 1 through 8 in Appendix B. Validated data packages were received on January 7, 2017, these were compared to

preliminary data, which were received while removal actions were progressing. These results were compared and no changes were noted and all data was deemed usable in the validated data packages that were delivered to EPA.

3.3.1 Foundry Sand Samples

Preliminary sample results for the four foundry sand samples that were collected on September 7 and 13, 2016 were received from the laboratory on October 3, 2016. The Level IV data package was received from the laboratory on January 7, 2017. The data was validated and the data validation report was sent to EPA on March 1, 2017. All results were found to be usable. The analytical results were compared to USEPA Title 40 Code of Federal Regulations (CFR) Section 261.24 list of maximum concentration of contaminants for toxicity characteristics regulatory levels, and the sand was determined to be nonhazardous (Table 1, Appendix B).

3.3.2 Soil Samples

Preliminary sample results for the 17 surface soil samples that were collected on September 7, 2016 were received from the laboratory on October 3, 2017. The Level IV data package was received from the laboratory on January 7, 2017. The data was validated and the data validation report was sent to EPA on March 1, 2017. All results were found to be usable. The TCLP analytical results were compared to USEPA Title 40 Code of Federal Regulations (CFR) Section 261.24 list of maximum concentration of contaminants for toxicity characteristics regulatory levels, and the soil was determined to be nonhazardous. The PCB results were compared to USEPA Industrial Removal Management Levels (RMLs), and no exceedances were observed. Pesticides and herbicides were not detected (Tables 2, 3, and 4, Appendix B).

3.3.3 Wipe Samples

Preliminary sample results for the 23 wipe samples that were collected on September 7, 2016 were received on October 3, 2016. The Level IV data package was received from the laboratory on October 23, 2016. The data was validated and the data validation report was sent to EPA on March 1, 2017. All results were found to be useable. Sample IW-WO-20, located inside the PCB Storage building near several PCB drums and transformers contained 26,200 total µg of Arcolor-1242. Post clean-up sample IW-WO-22, located in the same vicinity of IW-WO-20, indicated that PCB levels had been brought down to 22,500 total µg of Arcolor-1242. Post clean-up sample IW-WO-23 located in the PCB capacitor area contained 5.460 total µg of Arcolor-1242 (Table 5, Appendix B). None of the remaining samples

contained exceedances above the Code of Federal Regulations (CFR) PCB spill cleanup level for wipe samples of 100 µg of PCBs per 100 cm² of low-contact outdoor surfaces (see 40 CFR 761.125(c)(3)(iv)).

3.3.4 Bulk Oil Sample

Preliminary sample results for the one bulk oil sample that was collected on September 7, 2016 were received from the laboratory on October 3, 2016. The Level IV data package was received from the laboratory on October 23, 2016. The data was validated and the data validation report was sent to EPA on March 1, 2017. All data was found to be usable. The sample contained 439,000,000 micro grams per kilogram (µg/kg) of Aroclor-1242 (Table 6, Appendix B).

3.3.5 Solid Samples

Preliminary sample results for the two solid samples that were collected on September 7 and 8, 2016 were received from the laboratory on October 3, 2016. The Level IV data package was received from the laboratory on January 7, 2017. The data was validated and the data validation report was sent to EPA on March 1, 2017. All data was found to be usable. Lab analytical results indicated both solid samples were non-hazardous (Table 1 and 6, Appendix B).

3.3.6 Unknown drum samples

Preliminary sample results for the three unknown drum samples that were collected on September 8, 2016 were received from the laboratory on October 3, 2016. The Level IV data package was received from the laboratory on October 23, 2016. The data was validated and the data validation report was sent to EPA on March 1, 2017. All data was found to be usable. Samples results indicated that sample IW-DR-02 had a flashpoint of 116.3 degrees Fahrenheit (°F). Analytical results indicated no other hazards from the sampled drums (Table 6, Appendix B).

3.3.7 AST Samples

Preliminary sample results for the three AST samples that were collected on September 8, 2016 were received from the laboratory on October 3, 2016. The Level IV data package was received from the laboratory on October 23, 2016. The data was validated and the data validation report was sent to EPA on March 1, 2017. All data was found to be usable. Sample IW-AST-03 contained 15.5 milligrams per liter (mg/L) of Tetrachloroethene (PCE), which exceeds that CFR 261.24 toxicity characteristic regulatory level of 0.7 mg/L (Table 6, Appendix B).

3.3.8 Drain Sample

Preliminary sample results for the one drain sample that was collected on September 12, 2016 were received on October 3, 2016. The Level IV data package was received from the laboratory on October

23, 2016. The data was validated and the data validation report was sent to EPA on March 1, 2017. All data was found to be usable. The results detected 160 mg/L of cadmium, which exceeds the CFR 261.24 toxicity characteristic regulatory level of 1.0 mg/L. The pH was 7.41, and the flashpoint was greater than 140°F (Table 7, Appendix B).

3.3.9 ACM Samples

Sample results for the 15 ACM samples collected between September 6 and 30, 2016 were received on October 3, 2016. The data package was received from the laboratory on October 23, 2016. The data was verified and the data verification report was sent to EPA on March 1, 2017. Five of those samples (IW-BA-01, -02, -08, -09, and -13) contained asbestos above the USEPA Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP) of one percent, classifying them as regulated asbestos containing material (Table 8, Appendix B).

4.0 REMOVAL ACTION ACTIVITIES

From September 6 to November 10, 2016, USEPA, START, and the ERRS contractor conducted the removal action. USEPA On-Scene Coordinator (OSC) Craig Thomas was the primary site contact.

Before the removal action began, Environmental Quality Management (EQM, USEPA's primary ERRS contractor) developed a site-specific health and safety plan (HASP) for the site. The HASP detailed site hazards (including site-related contaminants of concern), air monitoring requirements, and action levels during work activities, and health and safety protocols for each task at the site. The HASP also described proper personal protective equipment (PPE) to be used on a task-by-task basis, as well as emergency procedures related to on-site work.

Tetra Tech developed the site-specific emergency contingency plan (ECP) (Tetra Tech 2016b). The ECP identifies additional emergency procedures related to on-site work, medical emergencies, fire, or explosion; and local contacts in case of emergency. Once approved, the plans were implemented throughout the removal, and activities were conducted under the direction of the on-site USEPA OSC and the ERRS removal manager (RM). Tetra Tech START personnel recorded daily site activities in accordance with Tetra Tech SAP (Tetra Tech 2016a) and Tetra Tech's Quality Assurance Project Plan (QAPP) for START (Tetra Tech 2016c).

This section describes the initial site setup, the removal of wastes from the Site by ERRS contractor, as well as air monitoring and confirmation sampling conducted by START.

4.1 INITIAL SITE SETUP

On September 6, 2016, USEPA, Tetra Tech, and ERRS personnel mobilized to the site to initiate the removal action and began preparing the site to accommodate site trailers, vehicles, and debris removal equipment. ERRS contractor designated the boundaries for the exclusion zone (EZ), contaminant reduction zone (CRZ), and command post. Activities included clearing debris and brush and inspecting and repairing the site boundary fencing. A decontamination zone was created in the CRZ by covering the ground with poly sheeting, and setting up a decontamination line that included PPE rinse stations and disposal areas. The decontamination line was chosen in the field depending on where work was being completed on a given day. The ERRS contractor set up two office trailers: one for USEPA and START personnel, and one for ERRS personnel. The site HASP was posted in the ERRS trailer, and all visitors to the site were required to review and sign the health and safety plan before they could visit and/or work on the site.

4.2 ELEMENTAL MERCURY AND MERCURY WASTE REMOVAL

On September 13, 2016, an ERRS “mercury trailer” was staged in the southern portion of the site near a bay door. The trailer contained ERRS’ PPE, as well as mercury vacuums and other equipment to perform the mercury removal.

From September 14 to September 19, 2016, ERRS conducted a cleanup in the break room of the locker room and shower facility where elemental mercury was observed. During START’s mercury assessment, mercury vapor readings exceeded $50 \mu\text{g}/\text{m}^3$ in the break room, and beads of mercury were observed on the floor and tables located in the room.

ERRS began by removing debris from areas affected by the mercury release. Once debris was removed from an area, ERRS personnel used a mercury vacuum to collect small debris, dust, and mercury beads in the break room area. After an area was vacuumed it would be scrubbed with HgX, a sulfur based mercury decontaminant powder. Drains, cracks, and any other areas where mercury had gone below the ground surface were sealed with concrete. Removed bulk debris from the spill area was classified as “Hazardous Waste (mercury)” and transferred into UN standard fiberboard boxes with polyurethane liners. Debris and elemental mercury collected in the waste jar from the mercury vacuum was classified as, Hazardous Waste (mercury with debris), and placed into UN standard screw top mercury waste pales. All mercury waste was staged in the drum/waste storage building until taken off site for disposal.

After the mercury clean-up was completed, START performed a confirmation screening. The average mercury vapor reading for the breathing zone in the break room was $0.5 \text{ ug}/\text{m}^3$. The highest observed reading was $2.3 \text{ ug}/\text{m}^3$ and taken 1 inch above a crack near the break room entrance.

Mercury removal was completed in the spill area on September 19, 2016. Mercury and mercury debris waste was shipped off site to Michigan Disposal Waste Treatment to Belleville, MI on November 8, 2016.

4.3 DRUM CONSOLIDATION AND DISPOSAL

From September 8 through October 26, 2016, ERRS personnel located, and collected hazardous waste containers throughout the site. Hazardous waste containers were consolidated into the drum/waste storage building. Several containers located by the ERRS contractor were labeled to contain flammable or corrosive liquids. These containers were transferred and grouped in the staging area on the south side of the storage building for hazard categorization (HazCat) sampling and analysis.

A total of 32 55-gallon drums and 69 5-gallon buckets were consolidated in the drum/waste storage building for HazCat analysis. All empty containers were cut and disposed of in a debris stockpile located west of the former chemical lab for off-site disposal (Figure 2 in Appendix A). Drums and containers with hazardous or unknown contents were staged in the southeast corner of the building near the south entrance, and a HazCat analysis was performed by an ERRS chemist. Based on the results and chemical compatibilities, multiple waste streams were identified that included pesticides, aerosols, paint, oil, acidic liquids (pH < 7), and alkaline liquids (pH > 7). When the waste streams were defined, ERRS personnel conducted mottling tests by combining portions of the wastes that were to be bulked together to ensure no reactions occurred. After the mottling tests, ERRS personnel consolidated compatible wastes into over-pack containers and Department of Transportation (DOT) shippable drums. From November 8 to 10, 2016, containers and drums were shipped off site to Michigan Disposal Waste Treatment in Belleville, MI.

4.4 PCB AND NON-PCB CAPACITOR REMOVAL AND PCB STAINING CLEAN-UP

This subsection provides a summary activities related to PCB and non-PCB capacitor removal, as well as PCB staining clean-up.

4.4.1 PCB and Non-PCB Capacitor Removal

On October 3 and October 18, 2016, ERRS staged and loaded PCB and non-PCB capacitors for off-site disposal. PCB capacitors were disposed of as hazardous waste (UN2315) and totaled 26,792 pounds. Non-PCB capacitors were disposed of as non-regulated waste and totaled 21,200 pounds. Capacitors were on pallets and staged in front of a bay door in the electrical transformer and PCB oil drum storage area building. All PCB capacitors and some of the Non-PCB capacitors were loaded onto a box truck on October 3, 2016. The remaining non-PCB capacitors were loaded onto a second box truck on October 18, 2016. The capacitors were sent to Environmental Recycling in Bowling Green, OH for treatment, recycling, and/or disposal.

4.4.2 PCB Staining Clean-Up

On October 20, 2016, ERRS began cleaning PCB oil stained areas where PCB capacitors were stored in the electrical transformer and PCB oil drum storage area (Figure 3 in Appendix A). ERRS began by scrubbing diesel fuel into the stained areas, then put an absorbent pad down to absorb the liquid. After the absorbent was picked up, a degreaser was scrubbed into the stained areas. START collected two confirmation wipe samples (IW-WO-22 and IW-WO-23) from the PCB stained areas after the degreaser dried. The confirmation wipe samples were collected to ensure PCB concentrations remaining in place

following ERRS cleaning were below applicable USEPA RMLs. Detected PCB concentrations in samples IW-WO-22 and IW-WO-23 did not exceed applicable USEPA RMLs. ERRS applied sealant to the floor following cleaning activities.

4.5 DRAIN LINE CLEANING AND PLUGGING

On October 6, 2016, ERRS used a wire brush to clean the former electroplating drain line. The brush was attached to extenders and a drill which ERRS used removed as much debris from the line as possible (approximately 50 pounds). On October 11, 2016, the line was plugged with a cement cap which was a mix of concrete and hydraulic cement.

The debris from the drain line was disposed of as NA 3077, Hazardous Waste (cadmium contaminated soil and debris). The debris was disposed at Michigan Disposal Waste Treatment in Belleville, MI.

4.6 ACM DEBRIS PILE REMOVAL AND DISPOSAL

From September 29 to October 26, 2016, ERRS consolidated and removed 16 piles of ACM debris of varying sizes (Figure 5 in Appendix A). Level C PPE was worn throughout debris removal activities in order to minimize risk of asbestos fiber inhalation.

ERRS first consolidated piles of demolition debris containing ACM, and staged the material in a debris loadout pile located south of East Sangamon Street and west of the former chemical lab (Figure 2 in Appendix A). During work ERRS used a water truck to suppress dust and limit the possibility of asbestos inhalation.

ERRS designated the boundaries for a debris loading zone and a decontamination zone for truck load out for off-site disposal. Activities included loadout of trucks with an excavator within the debris loading zone located adjacent to the debris stockpile west of the former chemical lab. Once loaded with debris the truck entered the decontamination zone located on North Lower Street on the west side of the engineering building. Debris was wrapped in poly for transport in the trucks. The debris was taken off-site for disposal at Five Oaks recycling and disposal facility (RDF) in Taylorville, IL.

4.6.1 Basement Excavation and Fill

Part of the ACM debris removal included the basement of a demolished building. The basement was located directly east of the transformer storage area (Figure 2 in Appendix A). A pile of debris was covering the basement and as a result the basement was not discovered until the overlying pile was removed.

The debris in the basement was removed from October 3 to October 5, 2016. After the debris was removed from the basement, it was backfilled with sand supplied from a local supplier. The backfill was completed on October 14, 2016.

4.6.2 Office Building Asbestos Abatement

ACM in the office building was sampled on September 6, 2016. Only IW- BA-08 and IW- BA-09 collected from floor tiles and IW-BA-13 collected from pipe insulation were identified to be Regulated Asbestos Containing Material (RACM) containing over 1 percent of Chrysotile Asbestos. On September 9, 2016, a pile of debris was removed from the first floor of the building and added to the ACM debris load out pile. ERRS contracted Thornburgh Abatement to remove ACM material from the office building. The abatement occurred from October 26 to November 10, 2016 to remove material associated with samples IW- BA-08, IW- BA-09, and IW-BA-13. Removed material was shipped off-site to Bloomington/ADS (Landfill #2) in Bloomington, IL for disposal.

4.7 AST LIQUID REMOVAL

On October 26, ERRS began pumping the liquid contained in three out of the four ASTs located on site into 55 gallon drums. One of the four ASTs was found to be empty during removal assessment activities. ERRS used a portable pump to remove the sampled liquid material from the ASTs for off-site removal. On October 27, the drums were over-packed into DOT shippable drums and loaded onto trucks for proper disposal.

4.8 REAL-TIME AIR MONITORING

This subsection provides a summary of air monitoring and air sampling activities conducted.

4.8.1 Air Monitoring

START personnel conducted real-time perimeter particulate air monitoring throughout the removal activities. Real-time air monitoring was described in detail in the final SAP (Tetra Tech 2016a). The purpose of the real-time air monitoring was to monitor fugitive particulates leaving the building while work was occurring. Four TSI® DustTrak II Aerosol Monitor 8530s (DustTraks) were deployed to measure particulate levels. Particulate monitoring locations were selected to identify dust concentrations with a particle size of 2.5 micrometers or less (PM_{2.5}) for receptors on and off site during removal action activities. The action level for this site was set at 2.5 mg/m³, which is based on one-half of the respirable fraction of Occupational Safety and Health Administration (OSHA) permissible exposure limit (PEL) for Particulates Not Otherwise Regulated of 5 mg/m³ (Tetra Tech 2016a). All real-time air monitoring

equipment was calibrated or checked for alarms on a daily basis. Equipment maintenance was performed onsite on an as-needed basis.

Particulate monitoring locations were selected to assess air quality upwind and downwind of the site building, as well as between the site and sensitive receptors, including nearby residential areas. Spatial coverage was adequate to account for potential changes in wind directions during the duration of the removal action. Primary air monitoring stations were located on the debris load out perimeter, with one station located west of the work trailers on a tripod stand; one station on East Sangamon Street south of the locker room and shower facility on a tripod stand; one station east of the debris stockpile on a tripod stand; and one station in the open building north of the former foundry sand disposal trench on a tripod stand (Figure 3 in Appendix A). Particulate monitoring stations were occasionally moved at the request of the OSC based on the day's work activities. When the location of a monitor was moved, the change was noted in the site logbook (Appendix C).

The action level was not exceeded along the debris load out perimeter of the site. Occasional readings exceeding the action level were observed when the DustTrak was moved to the east side of the building and was placed directly in the work zone. Tetra Tech notified the OSC and ERRS RM of each event. However, because of the short duration of each excursion (sustained for only a few seconds), no corrective actions were implemented.

On September 8th, a Tetra Tech representative was on site to connect the DustTraks to the VIPER monitoring network via modems and were linked to the real-time monitoring network via an internet connection. Real-time monitoring was conducted with alarm levels set at the action limits. USEPA and Tetra Tech personnel were immediately alerted if any action levels were exceeded so each elevated level could be investigated, verified (if possible), and documented. No exceedances occurred during the assessment or removal.

4.8.2 Air Sampling

Beginning on September 28, 2016, START conducted air sampling using 25 mm Asbestos TEM Air Sampling Cassettes attached to Gilian AirCon- 2 sampling pumps. Air sampling was conducted in accordance with Tetra Tech SAP for the Site (Tetra Tech 2016a). Air sampling locations were collocated with perimeter air monitoring stations (Figure 3 in Appendix A). Sampling was conducted from September 28 to October 27, 2016. During this period, no asbestos was detected (See Table 9 in Appendix B)

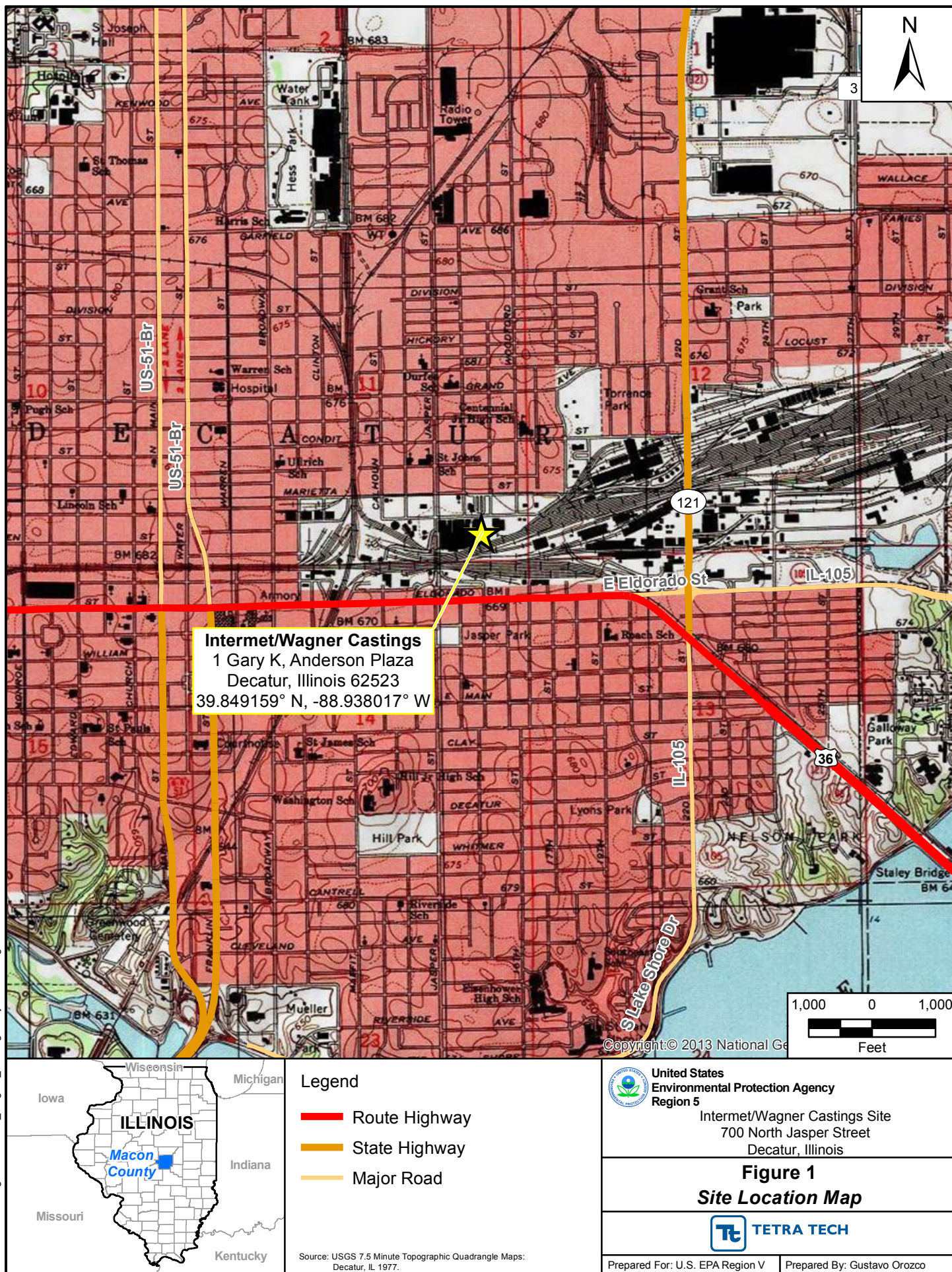
5.0 FUTURE ACTIVITIES

USEPA mitigated threats to public health and the environment posed by the presence of uncontrolled hazardous substances at the Internet Wagner Castings Site as a result of the removal action. No future activities are planned for this site.


6.0 REFERENCES

- Gannett Fleming. 2010. "Executive Summary." Remedial Action Completion Report and Request for NFR Letter. September.
- Illinois Environmental Protection Agency. 2014. "Referral Letter." August.
- Tetra Tech Inc. 2016a. "Sampling and Analysis Plan – Internet/Wagner Casting Site." Prepared for USEPA under Contract No. EP-S5-13-01. September 8.
- Tetra Tech Inc. 2016b. "Emergency Contingency Plan – Internet/Wagner Casting Site." Prepared for USEPA under Contract No. EP-S5-13-01. October 14.
- Tetra Tech Inc. 2016. "Emergency Contingency Plan – Internet/Wagner Casting Site." Prepared for USEPA under Contract No. EP-S5-13-01. October 16.
- Tetra Tech Inc. (Tetra Tech). 2016c. "Quality Assurance Project Plan (QAPP) for Superfund Technical Assessment and Response Team (START)." Revision No. 3. April

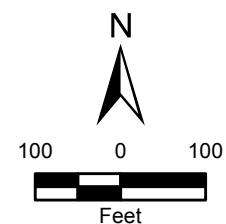
APPENDIX A
SITE FIGURES





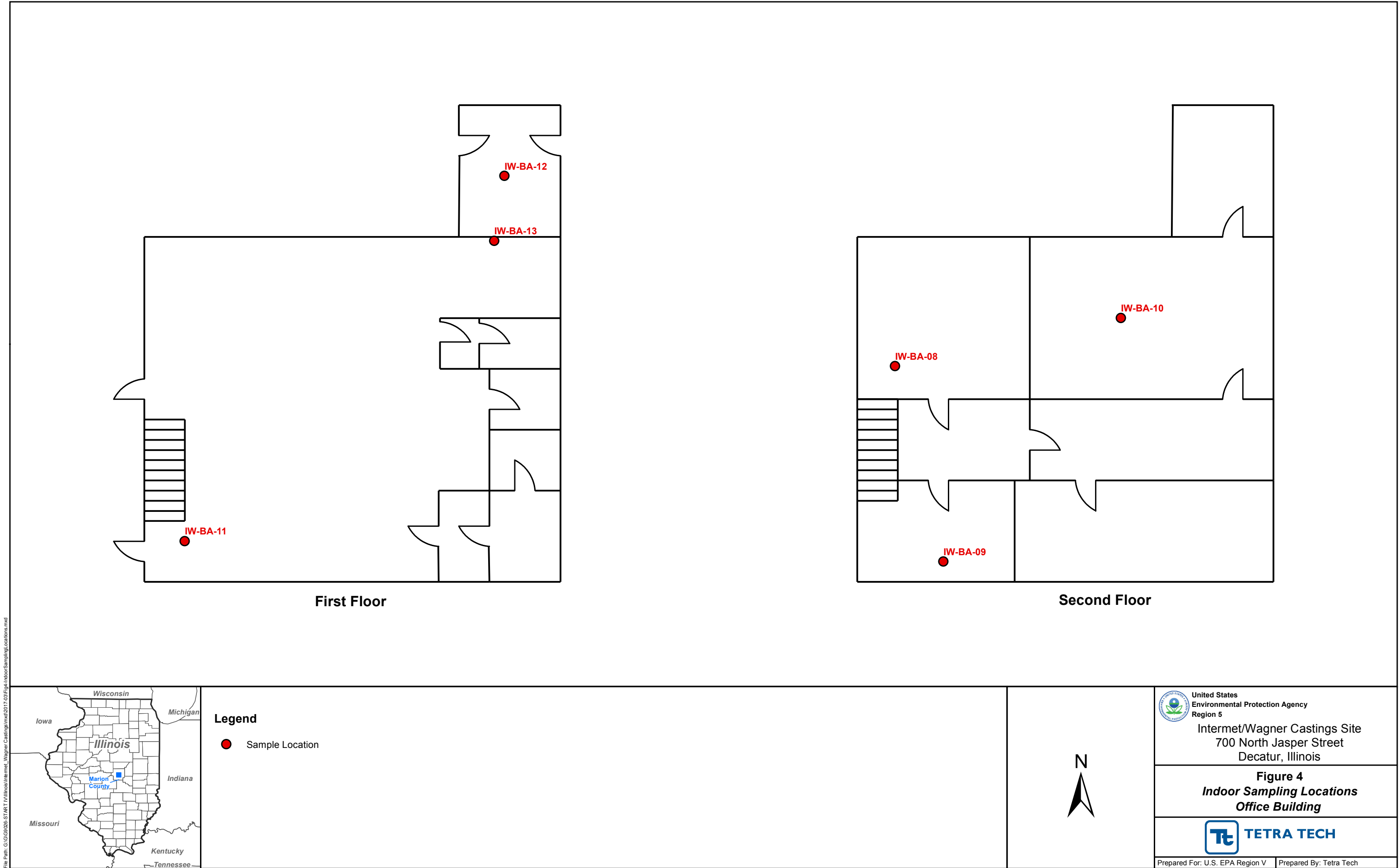


Legend
 Approximate Site Boundary

Source: Bing Maps Hybrid (2011-2012).
TDD No.: S05-0001-1606-403



 United States Environmental Protection Agency Region 5	Internet/Wagner Castings Site 700 North Jasper Street Decatur, Illinois
	Figure 2 Site Layout Map
	 TETRA TECH
Prepared For: USEPA	Prepared By: Tetra Tech, Inc



File Path: G:\G9826-START\Illinois\Internet_Wagner Castings\mxd\2017\03\Fig-4-Indoor Sampling Locations.mxd



File Path: G:\G09026-START\Illinois\Internet\Wagner Castings\mxd\20170315-SuspectedACMPiles.mxd
Date Saved: 4/28/2017

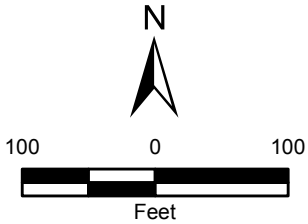


Legend

■ Suspected ACM Pile Location

Source: Fehr Graham Engineering & Environmental, Former Wagner Castings/Internet Foundry, 2014

TDD No.: S05-0001-1606-403



United States
Environmental Protection Agency
Region 5

Internet/Wagner Castings Site
700 North Jasper Street
Decatur, Illinois

Figure 5
Suspected ACM Piles



TETRA TECH

Prepared For: U.S. EPA Region V

Prepared By: Tetra Tech

APPENDIX B
TABLES

Table1: TCLP Metals
Foundry Sand and Solid Sample Results Table
Intermet/Wagner Castings

Sample Number :			EPA Title 40 Code of Federal Regulations (CFR) Section 261.24 list of maximum concentration of contaminants for toxicity characteristics regulatory levels (mg/L)	IW-FS-01		IW-FS-01 DUP		IW-FS-02		IW-FS-03		IW-FS-04*		IW-SO-01	
Matrix :				Solid		Solid		Solid		Solid		Solid		Solid	
Laboratory:				CT Laboratories		CT Laboratories		CT Laboratories		CT Laboratories		CT Laboratories		CT Laboratories	
Sample Date:				9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/13/2016		9/7/2016	
Sample Time:				14:00		14:00		14:05		14:10		14:15		14:15	
Duplicate:				DUP		DUP									
Compound	CAS #	Analytical Method	Regulatory Level	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier
Metals (mg/L)															
Arsenic	7440-38-2	EPA SW 6010	5.0	0.025		0.25		0.018		0.023		0.0078	J	0.000036	J
Barium	7440-39-3	EPA SW 6010	100.0	0.24		0.61	J	0.23		0.25		0.25		0.0092	J
Cadmium	7440-43-9	EPA SW 6010	1.0	ND	U	ND	U	ND	U	ND	U	0.04		0.25	
Chromium	7440-47-3	EPA SW 6010	5.0	ND	UJ	0.0009	J	ND	U	ND	U	0.0047		0.19	
Lead	7439-92-1	EPA SW 6010	5.0	0.017		0.023		0.0075	J	0.0087	J	0.0047		0.44	
Mercury	7439-97-6	EPA SW 6010	0.2	ND	U	ND	U	ND	U	0.000031	J	ND	U	0.013	
Selenium	7782-49-2	EPA SW 6010	1.0	0.025		0.028		0.014		0.011	J	0.012	J	0.008	J
Silver	7440-22-4	EPA SW 6010	5.0	0.0014	J	0.02		0.001	J	0.0051		ND	U	ND	U

Notes:

DUP = duplicate sample

J= Estimated Value.

ug/L = microgram per liter

ND= Non Detect

U = Analyte concentration was not above detection level.

UJ = Analyte concentration was not above detection level, which is considered approximate due to deficiencies in one or more quality control criteria

Value = Analyte Result (mg/L)

-The Regulatory Levels above can be located at <https://www.law.cornell.edu/cfr/text/40/261.24>

*= Due to a lab error sample IW-FS-04 was ran as under the sample name IW-FS-01. Sample IW-FS-01 taken on 9/13/2016 will be referred to as samle IW-FS-04 in the text and tables for this report.

Table 2: PCB's
Surface Soil Sample Results Table (SS-01 to 11)
Intermet/Wagner Castings

Sample Number :			United States Environmental Protection Agency (EPA) Regional Cumulative Removal Management Level (RML) Soil Supporting Table (a target risk (TR) level of 10-4 for carcinogen and a hazard quotient (HQ) or hazard index (HI) of 3 for non-carcinogen), May 2016 (mg/kg)	IW-SS-01		IW-SS-02		IW-SS-03		IW-SS-04		IW-SS-05		IW-SS-06		IW-SS-07	
Matrix :				Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Laboratory:				CT Laboratories		CT Laboratories		CT Laboratories		CT Laboratories		CT Laboratories		CT Laboratories		CT Laboratories	
Sample Date:				9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/7/2016	
Sample Time:				12:30		12:35		12:40		12:45		12:50		12:55		13:00	
Duplicate:																	
Compound	CAS #	Analytical Method	RML	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier
PCBs (ug/kg)																	
Aroclor-1016	12674-11-2	EPA SW8082	12,000	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ
Aroclor-1221	11104-28-2	EPA SW8082	20,000	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ
Aroclor-1232	11141-16-5	EPA SW8082	17,000	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ
Aroclor-1242	53469-21-9	EPA SW8082	23,000	143	J-	60.3	J-	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ
Aroclor-1248	12672-29-6	EPA SW8082	23,000	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ
Aroclor-1254	11097-69-1	EPA SW8082	3,500	242	J-	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ
Aroclor-1260	11096-82-5	EPA SW8082	24,000	122	J-	168	J-	243	J-	4,810		271	J-	76.1	J-	269	J-
Aroclor-1262	37324-23-5	EPA SW8082	NC	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ
Aroclor-1268	11100-14-4	EPA SW8082	NC	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ
Sample Number :			United States Environmental Protection Agency (EPA) Regional Cumulative Removal Management Level (RML) Soil Supporting Table (a target risk (TR) level of 10-4 for carcinogen and a hazard quotient (HQ) or hazard index (HI) of 3 for non-carcinogen), May 2016 (mg/kg)	IW-SS-08		IW-SS-09		IW-SS-10		IW-SS-10 DUP		IW-SS-11		IW-SS-11 DUP		IW-SS-15	
Matrix :				Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Laboratory:				CT Laboratories		CT Laboratories		CT Laboratories		CT Laboratories		CT Laboratories		CT Laboratories		CT Laboratories	
Sample Date:				9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/7/2016	
Sample Time:				13:05		13:10		13:15		13:15		13:20		13:20		13:20	
Duplicate:										DUP				DUP		DUP	
Compound	CAS #	Analytical Method	RML	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier
PCBs (ug/kg)																	
Aroclor-1016	12674-11-2	EPA SW8082	12,000	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ
Aroclor-1221	11104-28-2	EPA SW8082	20,000	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ
Aroclor-1232	11141-16-5	EPA SW8082	17,000	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ
Aroclor-1242	53469-21-9	EPA SW8082	23,000	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ
Aroclor-1248	12672-29-6	EPA SW8082	23,000	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ
Aroclor-1254	11097-69-1	EPA SW8082	3,500	ND	UJ	76	J-	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ
Aroclor-1260	11096-82-5	EPA SW8082	24,000	149	J-	44.4	J-	3,260	J-	4,710		1,080		983		6410	
Aroclor-1262	37324-23-5	EPA SW8082	NC	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ
Aroclor-1268	11100-14-4	EPA SW8082	NC	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ

Notes:

DUP = duplicate sample

J= Estimated Value.

J+= Estimated value and maby be biased high

J-= Estimated value and may be biased low

ug/kg = microgram per kilogram

ND= Non Detect

PCB = Polychlorinated biphenyls

U = Analyte concentration was not above detection level.

UJ = Analyte concentration was not above detection level, which is considered approximate due to deficiencies in one or more quality control criteria

Value = Analyte Result (ug/kg for PCB results)

The cumulative RMLs above can be located at <https://www.epa.gov/risk/regional-removal-management-levels-chemicals-rmls>

Table 3: PCB's and TCLP
Surface Soil Sample Results Table (SS-12, 13, 14, and 16)
Intermet/Wagner Castings

Sample Number : Matrix : Laboratory: Sample Date: Sample Time: Duplicate:			EPA Title 40 Code of Federal Regulations (CFR) Section 261.24 list of maximum concentration of contaminants for toxicity characteristics regulatory levels (mg/L)	IW-SS-12		IW-SS-12 DUP		IW-SS-13		IW-SS-14		IW-SS-16	
				Soil		Soil		Soil		Soil		Soil	
				CT Laboratories		CT Laboratories		CT Laboratories		CT Laboratories		CT Laboratories	
				9/7/2016 14:30		9/7/2016 14:30 DUP		9/7/2016 14:35		9/7/2016 14:40		9/9/2016 10:15	
Compound	CAS #	Analytical Method	Regulatory Levels	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier
PCBs (ug/kg)													
Aroclor-1016	12674-11-2	EPA SW8082	12,000	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ
Aroclor-1221	11104-28-2	EPA SW8082	20,000	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ
Aroclor-1232	11141-16-5	EPA SW8082	17,000	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ
Aroclor-1242	53469-21-9	EPA SW8082	23,000	ND	UJ	ND	UJ	ND	UJ	ND	UJ	166	J-
Aroclor-1248	12672-29-6	EPA SW8082	23,000	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ
Aroclor-1254	11097-69-1	EPA SW8082	3,500	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ
Aroclor-1260	11096-82-5	EPA SW8082	24,000	66.4	J-	70.9	J-	55.8	J-	188	J-	75.3	J-
Aroclor-1262	37324-23-5	EPA SW8082	NC	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ
Aroclor-1268	11100-14-4	EPA SW8082	NC	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ
VOC's (mg/L)													
1,1-Dichloroethene	75-35-4	EPASW8260C	0.7	ND	U	ND	U	ND	U	ND	U	ND	U
1,2-Dichloroethane	107-06-2	EPASW8260C	0.5	ND	U	ND	U	ND	U	ND	U	ND	U
Benzene	71-43-2	EPASW8260C	0.5	ND	U	ND	U	ND	U	ND	U	ND	U
Carbon tetrachloride	56-23-5	EPASW8260C	0.5	ND	U	ND	U	ND	U	ND	U	ND	U
Chlorobenzene	108-90-7	EPASW8260C	100	ND	U	ND	U	ND	U	ND	U	ND	U
Chloroform	67-66-3	EPASW8260C	6	ND	U	ND	U	ND	U	ND	U	ND	U
Tetrachloroethene	127-18-4	EPASW8260C	0.7	ND	U	ND	U	ND	U	ND	U	ND	U
Trichloroethene	79-01-6	EPASW8260C	0.5	ND	U	ND	U	ND	U	ND	U	ND	U
Vinyl chloride	75-01-4	EPASW8260C	0.2	ND	U	ND	U	ND	U	ND	U	ND	U
SVOC's (mg/L)													
1,4-Dichlorobenzene	106-46-7	EPA SW8270D	7.5	ND	U	ND	U	ND	U	ND	U	ND	U
2,4,5-Trichlorophenol	95-95-4	EPA SW8270D	400	ND	U	ND	U	ND	U	ND	U	ND	U
2,4,6-Trichlorophenol	88-06-2	EPA SW8270D	2	ND	U	ND	U	ND	U	ND	U	ND	U
2,4-Dinitrotoluene	121-14-2	EPA SW8270D	0.13	ND	U	ND	U	ND	U	ND	U	ND	U
2-Methylphenol	95-48-7	EPA SW8270D		ND	U	ND	U	ND	U	ND	U	ND	U
3 & 4-Methylphenol	1319-77-3	EPA SW8270D		ND	U	ND	U	ND	U	ND	U	ND	U
Hexachlorobenzene	118-74-1	EPA SW8270D	0.13	ND	U	ND	U	ND	U	ND	U	ND	U
Hexachlorobutadiene	87-68-3	EPA SW8270D	0.5	ND	U	ND	U	ND	U	ND	U	ND	U
Hexachloroethane	67-72-1	EPA SW8270D	3	ND	U	ND	U	ND	U	ND	U	ND	U
Pentachlorophenol	87-86-5	EPA SW8270D	100	ND	U	ND	U	ND	U	ND	U	ND	U
Pyridine	110-86-1	EPA SW8270D	5	ND	U	ND	U	ND	U	ND	U	ND	U
Metals (mg/L)													
Arsenic	7440-38-2	EPA SW6010	5	0.012	J+	0.0073	J+	0.012	J	0.01	J	0.012	J
Barium	7440-39-3	EPA SW6011	100	0.48		0.63		0.7		0.69		0.42	
Cadmium	7440-43-9	EPA SW6012	1	0.0045		0.0088		0.0026		0.016		0.0016	J
Chromium	7440-47-3	EPA SW6013	5	ND	U	ND	U	ND	U	ND	U	ND	U
Lead	7439-92-1	EPA SW6014	5	ND	UJ	0.0083	J	ND	U	0.0066		ND	U
Mercury	7439-97-6	EPA SW6015	0.2	ND	U	ND	U	ND	U	0.000036	J	ND	U
Selenium	7782-49-2	EPA SW6016	1	0.0059	J+	0.02	J+	0.012	J	0.011	J	ND	U
Silver	7440-22-4	EPA SW6017	5	ND	U	ND	U	ND	U	ND	U	ND	U
Pesticides (mg/L)													
alpha-Chlordane	5103-71-9	SW8081B	--	ND	U	ND	U	ND	U	ND	U	ND	U
Chlordane (Technical)	12789-03-6	SW8081B	0.03	ND	U	ND	U	ND	U	ND	U	ND	U
Endrin	72-20-8	SW8081B	0.02	ND	U	ND	U	ND	U	ND	U	ND	U
gamma-Chlordane	5103-74-2	SW8081B	--	ND	U	ND	U	ND	U	ND	U	ND	U
Heptachlor	76-44-8	SW8081B	0.008	ND	U	ND	U	ND	U	ND	U	ND	U
Heptachlor epoxide	1024-57-3	SW8081B	0.008	ND	U	ND	U	ND	U	ND	U	ND	U
Lindane	58-89-9	SW8081B	0.4	ND	U	ND	U	ND	U	ND	U	ND	U
Methoxychlor	72-43-5	SW8081B	10	ND	U	ND	U	ND	U	ND	U	ND	U
Toxaphene	8001-35-2	SW8081B	0.5	ND	U	ND	U	ND	U	ND	U	ND	U
Herbicides (mg/L)													
2,4,5-TP (Silvex)	93-72-1	SW8151A	10	ND	UJ	ND	UJ	ND	U	ND	U	ND	U
2,4-D	94-75-7	SW8151A	10	ND	UJ	ND	UJ	ND	U	ND	U	ND	U

Notes:

DUP = duplicate sample

J= Estimated Value.

J+= Estimated value and may be biased high

J-= Estimated value and may be biased low

ug/kg = microgram per kilogram

mg/L = milligram per liter

ND= Non Detect

PCB = Polychlorinated biphenyls

TCLP = Toxicity Characteristic Leaching Procedure

U = Analyte concentration was not above detection level.

UJ = Analyte concentration was not above detection level, which is considered approximate due to deficiencies in one or more quality control criteria

Value = Analyte Result (ug/kg for PCB results and mg/L for TCLP results)

-The Regulatory Levels above can be located at <https://www.law.cornell.edu/cfr/text/40/261.24>

Table 4: Waste Profile
Surface Soil Sample Results Table (SS-17)
Internert/Wagner Castings

Sample Number : Matrix: Laboratory: Sample Date: Sample Time: Duplicate:			United States Environmental Protection Agency (EPA) Regional Cumulative Removal Management Level (RML) Soil Supporting Table (a target risk (TR) level of 10-4 for carcinogen and a hazard quotient (HQ) or hazard index (HI) of 3 for non-carcinogen). May 2016 (mg/kg)		IW SS-17 CT Laboratories 10/7/2016 11:00	
Compound	CAS #	Analytical Method	RML	Value	TL Qualifier	
VOC's (mg/kg)						
1,1,1-Trichloroethane	71-55-6	SW8260C	110000	ND	U	
1,1,2,2-Tetrachloroethane	79-34-5	SW8260C	270	ND	U	
1,1,2-Trichloroethane	79-00-5	SW8260C	19	ND	U	
1,1-Dichloroethane	75-35-3	SW8260C	1800	ND	U	
1,1-Dichloroethene	75-35-4	SW8260C	3000	ND	U	
1,1,1-Trichloroethene	87-61-6	SW8260C	2800	ND	U	
1,1,4,4-Tetrachloroethene	120-82-1	SW8260C	770	ND	U	
1,2-Dibromo-3-chloropropane	96-12-8	SW8260C	6.4	ND	U	
1,2-Dichloroethane	106-84-4	SW8260C	16	ND	U	
1,2-Dichloroethene	95-50-1	SW8260C	38000	ND	U	
1,2-Dichloroethane	107-66-2	SW8260C	200	ND	U	
1,2-Dichloropropane	78-87-5	SW8260C	200	ND	U	
1,3-Dichlorobenzene	641-73-1	SW8260C	NC	ND	U	
1,4-Dichlorobenzene	106-46-7	SW8260C	1100	ND	U	
1,4-Dioxane	123-91-1	SW8260C	2400	ND	U	
11,2,2-Trichloro-1,1,2,2-tetrafluoroethane	76-13-1	SW8260C	500000	ND	U	
2-Acetonone	78-93-3	SW8260C	580000	ND	U	
2-Hexanone	581-78-6	SW8260C	4000	ND	U	
4-Methyl-2-pentanone	108-10-1	SW8260C	420000	ND	U	
Acetone	67-64-1	SW8260C	200000	ND	U	
Benzene	71-43-2	SW8260C	510	ND	U	
Bromochloroethane	146-81-1	SW8260C	1100	ND	U	
Bromodichloroethane	75-27-4	SW8260C	110	ND	U	
Bromoforn	75-28-2	SW8260C	8000	ND	U	
Bromomethane	74-83-9	SW8260C	90	ND	U	
Carbon disulfide	75-13-0	SW8260C	10000	ND	U	
Carbon tetrachloride	56-23-5	SW8260C	280	ND	U	
Chlorobenzene	108-86-7	SW8260C	6000	ND	U	
Chloroethane	75-00-3	SW8260C	170000	ND	U	
Chloroform	71-43-3	SW8260C	140	ND	U	
Chloromethane	74-87-3	SW8260C	1400	ND	U	
Cis-1,2-Dichloroethene	156-59-2	SW8260C	7000	ND	U	
Cis-1,3-Dichloropropene	10001-01-5	SW8260C	NC	ND	U	
Cyclohexane	110-82-7	SW8260C	9200	ND	U	
Dibromochloromethane	144-46-1	SW8260C	2800	ND	U	
Dibromodifluoromethane	75-71-8	SW8260C	1900	ND	U	
Dibromomethane	100-41-4	SW8260C	2100	ND	U	
Dibromochloroethene	88-81-3	SW8260C	3000	ND	U	
Di-n-pentene	179601-23-1	SW8260C	7100	ND	U	
Methyl acetate	79-20-9	SW8260C	150000	0.0132	J	
Methyl tert-butyl ether	1634-04-4	SW8260C	21000	ND	U	
Methylcyclohexane	108-87-2	SW8260C	NC	ND	U	
Methylene chloride	75-09-2	SW8260C	6100	0.0068	J	
n-Heptane	66-47-6	SW8260C	8400	ND	U	
Styrene	100-42-5	SW8260C	100000	ND	U	
Tetrachloroethene	127-18-4	SW8260C	1200	ND	U	
Toluene	108-88-3	SW8260C	140000	ND	U	
Trans-1,2-Dichloroethene	156-60-5	SW8260C	7000	ND	U	
Trans-1,3-Dichloropropene	10003-03-6	SW8260C	NC	ND	U	
Trichloroethene	78-01-6	SW8260C	56	ND	U	
Trichlorofluoromethane	75-68-4	SW8260C	110000	ND	U	
Vinyl chloride	75-01-4	SW8260C	270	ND	U	
SVOC's (mg/kg)						
1,1'-Biphenyl	92-52-4	SW8270D	600	ND	U	
1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D	1100	ND	U	
2,4,6-Trichlorophenol	95-93-4	SW8270D	25000	ND	U	
2,4,5-Trichlorophenol	88-06-2	SW8270D	2100	ND	U	
2,4-Dichlorophenol	120-83-2	SW8270D	7400	ND	U	
2,4-Dimethylphenol	105-67-8	SW8270D	49000	ND	U	
2,4-Dinitrophenol	51-28-5	SW8270D	4900	ND	U	
2,4-Dinitrotoluene	121-14-1	SW8270D	140	ND	U	
2,6-Dinitrotoluene	686-20-2	SW8270D	150	ND	U	
2-Chloronaphthalene	91-58-7	SW8270D	18000	ND	U	
2-Chlorophenol	95-51-6	SW8270D	1800	ND	U	
2-Methylnaphthalene	91-51-6	SW8270D	9000	ND	U	
2-Methylphenol	95-48-7	SW8270D	12000	ND	U	
3-Nitroaniline	88-71-4	SW8270D	24000	ND	U	
3-Nitrophenol	88-75-5	SW8270D	NC	ND	U	
3,4-Dimethylphenol	119-77-3	SW8270D	25000	ND	U	
3,4-Dichlorobenzidine	111-84-1	SW8270D	110	ND	U	
3-Nitroaniline	99-08-2	SW8270D	NC	ND	U	
4,4'-Dinitro-2-methylphenol	144-35-3	SW8270D	200	ND	U	
4-Bromophenyl phenyl ether	101-55-3	SW8270D	NC	ND	U	
4-Chloro-3-methylphenol	59-50-7	SW8270D	25000	ND	U	
4-Chloroaniline	106-47-8	SW8270D	1100	ND	U	
4-Chlorophenyl phenyl ether	2009-72-3	SW8270D	NC	ND	U	
4-Nitroaniline	100-51-6	SW8270D	8000	ND	U	
4-Nitrophenol	100-52-7	SW8270D	NC	ND	U	
Acenaphthene	83-32-9	SW8270D	14000	ND	U	
Acenaphthylene	208-96-6	SW8270D	NC	ND	U	
Acenaphthene	98-65-2	SW8270D	35000	ND	U	
Adrhazene	120-12-7	SW8270D	68000	ND	U	
Aldazine	8912-34-9	SW8270D	1000	ND	U	
Benzaldehyde	100-52-7	SW8270D	82000	ND	U	
Benzo(a)anthracene	56-55-6	SW8270D	280	ND	U	
Benzo(a)pyrene	50-12-8	SW8270D	29	ND	U	
Benzo(b)fluoranthene	205-99-2	SW8270D	290	ND	U	
Benzo(g,h,i)perylene	193-14-3	SW8270D	NC	ND	U	
Benzo(k)fluoranthene	207-08-9	SW8270D	2900	ND	U	
Ben(z)chloranthracene	111-81-1	SW8270D	7400	ND	U	
Ben(z)chloranthracene	111-44-4	SW8270D	100	ND	U	
Ben(z)chlorosopropyl ether	108-60-1	SW8270D	14000	ND	U	
Ben(z)ethylphenylphthalate	117-81-7	SW8270D	18000	ND	U	
Ben(z)ethylphenylphthalate	51-45-7	SW8270D	12000	ND	U	
Caprolactam	105-60-2	SW8270D	120000	ND	U	
Carbazole	86-74-8	SW8270D	NC	ND	U	
Chrysene	218-01-9	SW8270D	29000	ND	U	
Dibenz(a,h)anthracene	175-79-3	SW8270D	29	ND	U	
Dibenzofuran	112-64-9	SW8270D	1200	ND	U	
Dibenzophthalate	84-66-2	SW8270D	200000	ND	U	
Dibenzophthalate	111-81-1	SW8270D	NC	ND	U	
Di-n-butylphthalate	84-73-2	SW8270D	25000	ND	U	
Di-n-octylphthalate	117-84-0	SW8270D	25000	ND	U	
Dibenzofuran	106-44-0	SW8270D	9000	ND	U	
Fluorene	86-73-7	SW8270D	90000	ND	U	
Hexachlorobenzene	118-74-1	SW8270D	16	ND	U	
Hexachlorocyclopentadiene	7-28-3	SW8270D	510	ND	U	
Hexachlorocyclopentadiene	77-47-4	SW8270D	21	ND	U	
Hexachlorocyclopentadiene	67-71-1	SW8270D	800	ND	U	
Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D	290	ND	U	
Isoquinoline	78-59-1	SW8270D	24000	ND	U	
Naphthalene	91-20-3	SW8270D	1700	ND	U	
Nitrobenzene	98-95-3	SW8270D	2200	ND	U	
N-Nitroso-di-n-propylamine	621-64-7	SW8270D	10	ND	U	
N-Nitrosodiphenylamine & Diphenylamine	36-41-2,35	SW8270D	47000	ND	U	
Pentachlorophenol	87-86-5	SW8270D	400	ND	U	
Phenanthrene	85-60-8	SW8270D	NC	ND	U	
Phenol	108-95-2	SW8270D	74000	ND	U	
Pyrene	129-00-0	SW8270D	6800	ND	U	
Metals (mg/kg)						
Aluminum	7429-90-5	SW6010	340000	842	J	
Antimony	7440-36-0	SW6010	1400	1	J	
Arsenic	7440-38-2	SW6010	500	1.7	J	
Barium	7440-39-3	SW6010	65000	11.3	J	
Beryllium	7440-41-7	SW6010	6000	ND	U	
Cadmium	7440-43-9	SW6010	2900	ND	U	
Calcium	7440-70-2	SW6010	NC	54700	J	
Chromium	7440-47-3	SW6010	NC	2.8	J	
Cobalt	7440-48-4	SW6010	1000	2.5	J	
Copper	7440-50-8	SW6010	14000	1	J	
Cyanide	74-89-8	SW6010	250000	4030	J	
Lead	7439-92-1	SW6010	800	3.6	J	
Magnesium	7439-95-4	SW6010	NC	1700	J	
Manganese	7439-96-5	SW6010	77000	172	J	
Mercury	7439-97-6	SW7471B	140	0.0055	J	
Nickel	7440-02-0	SW6010	67000	5.7	J	
Potassium	7440-09-7	SW6010	NC	180	J	
Selenium	7782-49-2	SW6010	4000	0.39	J	
Silver	7440-22-4	SW6010	18000	ND	U	
Sodium	7440-23-5	SW6010	NC	55.9	J	
Thallium	7440-28-0	SW6010	0.16	15	J	
Zinc	7440-66-2	SW6010	17000	4.4	J	
Zinc	7440-66-6	SW6010	118000	15.2	J	

Notes:
DUP = duplicate sample
J = Estimated Value
J+ = Estimated value and may be biased high
J- = Estimated value and may be biased low
ug/kg = microgram per kilogram
ND = Non Detect
PCB = Polychlorinated biphenyls
U = Analyte concentration was not above detection level.
U+ = Analyte concentration was not above detection level, which is considered approximate due to deficiencies in one or more quality control criteria
Value = Analyte Result (ug/kg for PCB results)

The cumulative RMLs above can be located at <https://www.epa.gov/risk/regional-removal-management-levels-chemicals-rmls>

Table 5: PCB's
Wipe Sample Results Table (WO-01 to 23)
Intermet/Wagner Castings

Sample Number : Matrix : Laboratory: Sample Date: Sample Time: Duplicate:			EPA Title 40 Code of Federal Regulations (CFR) Section 761.125, PCB Spill Cleanup Requirements for Low Contact Outdoor Surfaces	IW-WO-01		IW-WO-02		IW-WO-03		IW-WO-04		IW-WO-05		IW-WO-06	
				Wipe		Wipe		Wipe		Wipe		Wipe		Wipe	
				CT Laboratories		CT Laboratories		CT Laboratories		CT Laboratories		CT Laboratories		CT Laboratories	
				9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/7/2016	
				8:20		8:25		8:30		8:35		8:40		8:45	
Compound	CAS #	Analytical Method	Regulatory Levels	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier
PCBs (Total ug/100cm ²)															
Aroclor-1016	12674-11-2	EPA SW8082	100	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Aroclor-1221	11104-28-2	EPA SW8082	100	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Aroclor-1232	11141-16-5	EPA SW8082	100	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Aroclor-1242	53469-21-9	EPA SW8082	100	1.35		9.64		2.64		0.13	J	0.13	J	0.12	J
Aroclor-1248	12672-29-6	EPA SW8082	100	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Aroclor-1254	11097-69-1	EPA SW8082	100	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Aroclor-1260	11096-82-5	EPA SW8082	100	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ
Aroclor-1262	37324-23-5	EPA SW8082	100	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Aroclor-1268	11100-14-4	EPA SW8082	100	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U

Sample Number : Matrix : Laboratory: Sample Date: Sample Time: Duplicate:			EPA Title 40 Code of Federal Regulations (CFR) Section 761.125, PCB Spill Cleanup Requirements for Low Contact Outdoor Surfaces	IW-WO-07		IW-WO-08		IW-WO-09		IW-WO-10		IW-WO-11		IW-WO-12	
				Wipe		Wipe		Wipe		Wipe		Wipe		Wipe	
				CT Laboratories		CT Laboratories		CT Laboratories		CT Laboratories		CT Laboratories		CT Laboratories	
				9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/7/2016	
				8:50		8:55		9:00		9:05		9:10		9:15	
Compound	CAS #	Analytical Method	Regulatory Levels	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier
PCBs (Total ug/100cm ²)															
Aroclor-1016	12674-11-2	EPA SW8082	100	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Aroclor-1221	11104-28-2	EPA SW8082	100	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Aroclor-1232	11141-16-5	EPA SW8082	100	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Aroclor-1242	53469-21-9	EPA SW8082	100	0.1	J	ND	U	ND	U	ND	U	ND	U	ND	U
Aroclor-1248	12672-29-6	EPA SW8082	100	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Aroclor-1254	11097-69-1	EPA SW8082	100	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Aroclor-1260	11096-82-5	EPA SW8082	100	ND	UJ	2.51	J-	0.63	J-	ND	UJ	ND	UJ	ND	UJ
Aroclor-1262	37324-23-5	EPA SW8082	100	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Aroclor-1268	11100-14-4	EPA SW8082	100	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U

Notes:
 DUP = duplicate sample
 J= Estimated Value
 J-= Estimated value and may be biased low
 ND= Non Detect
 Total ug/100 cm² = Total micrograms per 100 square centimeters
 U = Analyte concentration was not above detection level.
 UJ = Analyte concentration was not above detection level, which is considered approximate due to deficiencies in one or more quality control criteria
 Value above screening level

Table 5: PCB's
Wipe Sample Results Table (WO-01 to 23)
Intermet/Wagner Castings

Sample Number :			EPA Title 40 Code of Federal Regulations (CFR) Section 761.125, PCB Spill Cleanup Requirements for Low Contact Outdoor Surfaces	IW-WO-13		IW-WO-14		IW-WO-15		IW-WO-16		IW-WO-17		IW-WO-17 DUP	
Matrix :				Wipe		Wipe		Wipe		Wipe		Wipe		Wipe	
Laboratory:				CT Laboratories		CT Laboratories		CT Laboratories		CT Laboratories		CT Laboratories		CT Laboratories	
Sample Date:				9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/7/2016	
Sample Time:				9:25		9:30		9:35		9:40		10:00		10:00	
Duplicate:													DUP		
Compound	CAS #	Analytical Method	Regulatory Levels	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier
PCBs (Total ug/100cm ²)															
Aroclor-1016	12674-11-2	EPA SW8082	100	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Aroclor-1221	11104-28-2	EPA SW8082	100	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Aroclor-1232	11141-16-5	EPA SW8082	100	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Aroclor-1242	53469-21-9	EPA SW8082	100	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Aroclor-1248	12672-29-6	EPA SW8082	100	ND	U	ND	U	ND	U	ND	U	36.9		49.4	
Aroclor-1254	11097-69-1	EPA SW8082	100	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Aroclor-1260	11096-82-5	EPA SW8082	100	ND	UJ	0.12	J-	0.14	J-	ND	UJ	ND	UJ	ND	UJ
Aroclor-1262	37324-23-5	EPA SW8082	100	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Aroclor-1268	11100-14-4	EPA SW8082	100	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U

Sample Number :			EPA Title 40 Code of Federal Regulations (CFR) Section 761.125, PCB Spill Cleanup Requirements for Low Contact Outdoor Surfaces	IW-WO-18		IW-WO-18 DUP		IW-WO-19		IW-WO-19 DUP		IW-WO-20		IW-WO-21	
Matrix :				Wipe		Wipe		Wipe		Wipe		Wipe		Wipe	
Laboratory:				CT Laboratories		CT Laboratories		CT Laboratories		CT Laboratories		CT Laboratories		CT Laboratories	
Sample Date:				9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/7/2016	
Sample Time:				10:05		10:05		10:10		10:10		10:15		10:20	
Duplicate:					DUP				DUP						
Compound	CAS #	Analytical Method	Regulatory Levels	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier
PCBs (Total ug/100cm ²)															
Aroclor-1016	12674-11-2	EPA SW8082	100	ND	UJ	ND	UJ	ND	UJ	ND	U	ND	U	ND	U
Aroclor-1221	11104-28-2	EPA SW8082	100	ND	UJ	ND	UJ	ND	UJ	ND	U	ND	U	ND	U
Aroclor-1232	11141-16-5	EPA SW8082	100	ND	UJ	ND	UJ	ND	UJ	ND	U	ND	U	ND	U
Aroclor-1242	53469-21-9	EPA SW8082	100	1.03	J-	2.37	J-	5.14	J-	61.6	J	26,200		14.2	
Aroclor-1248	12672-29-6	EPA SW8082	100	ND	UJ	ND	UJ	ND	UJ	ND	U	ND	U	ND	U
Aroclor-1254	11097-69-1	EPA SW8082	100	ND	UJ	ND	UJ	ND	UJ	ND	U	ND	U	ND	U
Aroclor-1260	11096-82-5	EPA SW8082	100	ND	UJ	ND	UJ	ND	UJ	ND	U	ND	U	ND	U
Aroclor-1262	37324-23-5	EPA SW8082	100	ND	UJ	ND	UJ	ND	UJ	ND	U	ND	U	ND	U
Aroclor-1268	11100-14-4	EPA SW8082	100	ND	UJ	ND	UJ	ND	UJ	ND	U	ND	U	ND	U

Notes:
 DUP = duplicate sample
 J= Estimated Value
 J-= Estimated value and may be biased low
 ND= Non Detect
 Total ug/100 cm² = Total micrograms per 100 square centimeters
 U = Analyte concentration was not above detection level.
 UJ = Analyte concentration was not above detection level, which is considered approximate due to deficiencies in one or more quality control criteria
 Value above screening level

Table 5: PCB's
Wipe Sample Results Table (WO-01 to 23)
Intermet/Wagner Castings

Sample Number :			EPA Title 40 Code of Federal Regulations (CFR) Section 261.24 list of maximum concentration of contaminants for toxicity characteristics regulatory	IW-WO-22		IW-WO-23	
Matrix :				Wipe		Wipe	
Laboratory:				CT Laboratories		CT Laboratories	
Sample Date:				10/20/2016		10/20/2016	
Sample Time:				14:40		14:42	
Duplicate:							
Compound	CAS #	Analytical Method	Regulatory Levels	Value	Tt Qualifier	Value	Tt Qualifier
PCBs (Total ug/100 cm ²)							
Aroclor-1016	12674-11-2	EPA SW8082	100	ND	UJ	ND	UJ
Aroclor-1221	11104-28-2	EPA SW8082	100	ND	UJ	ND	UJ
Aroclor-1232	11141-16-5	EPA SW8082	100	ND	UJ	ND	UJ
Aroclor-1242	53469-21-9	EPA SW8082	100	22500	J-	5460	J-
Aroclor-1248	12672-29-6	EPA SW8082	100	ND	UJ	ND	UJ
Aroclor-1254	11097-69-1	EPA SW8082	100	ND	UJ	ND	UJ
Aroclor-1260	11096-82-5	EPA SW8082	100	ND	UJ	ND	UJ
Aroclor-1262	37324-23-5	EPA SW8082	100	ND	UJ	ND	UJ
Aroclor-1268	11100-14-4	EPA SW8082	100	ND	UJ	ND	UJ

Notes:

DUP = duplicate sample

J= Estimated Value

J-= Estimated value and may be biased low

ND= Non Detect

Total ug/100 cm² = Total micrograms per 100 square centimeters

U = Analyte concentration was not above detection level.

UJ = Analyte concentration was not above detection level, which is considered approximate due to deficiencies in one or more quality control criteria

Value above screening level

Table 6: Waste Profiles
Unknown Material Results Table
Internet/Wagner Castings

Sample Number : Matrix : Laboratory : Sample Date : Sample Time : Duplicate :			EPA Title 40 Code of Federal Regulations (CFR) Section 261.24 list of maximum concentration of contaminants for toxicity characteristics regulatory levels (mg/L)*	IW-DR-02 Waste CT Laboratories 9/8/2016 10:40		IW-DR-06 Waste CT Laboratories 9/8/2016 10:50		IW-DR-09 Waste CT Laboratories 9/8/2016 11:00		IW-SO-02 Soil CT Laboratories 9/8/2016 11:20		IW-AST-01 Waste CT Laboratories 9/8/2016 10:40		IW-AST-02 Waste CT Laboratories 9/8/2016 10:50		IW-AST-03 Waste CT Laboratories 9/8/2016 11:00		IW-BO-01 Liquid CT Laboratories 9/7/2016 10:40		
Compound	CAS #	Analytical Method		Regulatory Levels	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier	Value	Tt Qualifier
PCB's (ug/kg)**																				
Aroclor-1016	12674-11-2	EPA SW8082		12,000	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Aroclor-1221	11104-28-2	EPA SW8082		20,000	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Aroclor-1232	11141-16-5	EPA SW8082		17,000	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Aroclor-1242	53469-21-9	EPA SW8082		23,000	1200	J	ND	U	ND	U	ND	U	2220	J	ND	U	1090	J	439,000,000	
Aroclor-1248	12672-29-6	EPA SW8082		23,000	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Aroclor-1254	11007-69-1	EPA SW8082		3,500	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Aroclor-1260	11096-82-5	EPA SW8082		24,000	ND	U	ND	U	ND	U	ND	U	4040	J	ND	U	3470	J	ND	U
Aroclor-1262	37324-23-5	EPA SW8082		NC	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Aroclor-1268	11100-14-4	EPA SW8082		NC	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
VOC's (mg/kg)																				
1,1-Dichloroethene	75-35-4	EPASW8260C		0.7	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
1,2-Dichloroethane	107-06-2	EPASW8260C		0.5	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Benzene	71-43-2	EPASW8260C		0.5	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Carbon tetrachloride	56-23-5	EPASW8260C		0.5	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Chlorobenzene	108-90-7	EPASW8260C		100	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Chloroform	67-66-3	EPASW8260C		6	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Tetrachloroethene	127-18-4	EPASW8260C		0.7	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	13.5	J	ND	U
Trichloroethene	79-01-6	EPASW8260C		0.5	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Vinyl chloride	75-01-4	EPASW8260C		0.2	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
SVOC's (mg/kg)																				
1,4-Dichlorobenzene	106-46-7	EPA SW8070D		7.5	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
2,4,5-Trichlorophenol	95-95-4	EPA SW8070D		400	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
2,4,6-Trichlorophenol	88-06-2	EPA SW8070D		2	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
2,4-Dinitrotoluene	121-14-2	EPA SW8070D		0.13	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
3-Methylphenol	95-48-7	EPA SW8070D		NC	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
3 & 4-Methylphenol	1319-77-3	EPA SW8070D		NC	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Hexachlorobenzene	118-74-1	EPA SW8070D		0.13	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Hexachlorobutadiene	87-68-3	EPA SW8070D		0.5	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Hexachloroethane	67-72-1	EPA SW8070D		3	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Pentachlorophenol	87-86-5	EPA SW8070D		100	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Pyridine	110-86-1	EPA SW8070D		5	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Metals (mg/kg)																				
Arsenic	7440-38-2	EPA SW 6010		5	ND	U	0.81	J	0.85	J+	3		ND	U	ND	U	ND	U	ND	U
Barium	7440-39-3	EPA SW 6010		100	0.11	J+	ND	U	0.85	J	6.6		0.1	J+	0.16	J+	0.11	J+	ND	U
Cadmium	7440-43-9	EPA SW 6010		1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Chromium	7440-47-3	EPA SW 6010		5	0.2	J	ND	U	0.14	U	2		ND	U	ND	U	ND	U	ND	U
Cobalt	7440-48-4	EPA SW 6010		5	ND	U	ND	U	ND	U	2.5		ND	U	ND	U	ND	U	ND	U
Mercury	7439-97-6	EPA SW7471B		0.2	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	0.0091		ND	U
Selenium	7782-49-2	EPA SW 6010		1	ND	U	ND	U	0.061	J	0.35	J	ND	U	ND	U	ND	U	ND	U
Silver	7440-22-4	EPA SW 6010		5	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Other																				
pH	PH	SW9045		≤2 or ≥12.5 S.U.***	2.35	J	3.15		6.94		2.18	J	5.9		6.55		5.29		NS	
Cyanide, Reactive	57-12-5	SW7.3		N/A	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Sulfide, Reactive	18496-25-8	SW7.3		N/A	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Flashpoint	FLASHPRT	SW1010		<140 T****	116.2		>140		>140		>140		>140		>140		>140		NS	

Notes:

J= Estimated Value.

ug/kg = microgram per kilogram

mg/L = milligram per liter

ND= Non Detect

NS = Not sampled

PCB = Polychlorinated biphenyls

TCLP = Toxicity Characteristic Leaching Procedure

U = Analyte concentration was not above detection level.

Value = Analyte Result (ug/kg for PCB results and mg/L for TCLP and corrosivity results)

*- Due to the unknown density of the waste samples, the lab reported results in ug/mg or mg/kg. Assuming density is equal to 1, mg/kg= mg/L

** =United States Environmental Protection Agency (EPA) Regional Cumulative Removal Management Level (RML) Soil Supporting Table

(a target risk (TR) level of 10-4 for carcinogen and a hazard quotient (HQ) or hazard index (HI) of 3 for non-carcinogen), May 2016 (mg/kg)

***= Regulation from EPA Title 40 CFR 261.22 Characteristic of corrosivity <<https://www.law.cornell.edu/cfr/text/40/261.22>>

****= Regulation from EPA Title 40 CFR 261.21 Characteristic of ignitability <<https://www.law.cornell.edu/cfr/text/40/261.21>>

Table 7: Waste Profile
Drain Plug Sample Results Table (DP-01)
Intermet/Wagner Castings

Sample Number : Matrix : Laboratory: Sample Date: Sample Time: Duplicate:			EPA Title 40 Code of Federal Regulations (CFR) Section 261.24 list of maximum concentration of contaminants for toxicity characteristics regulatory levels (mg/L)	IW-DP-01	
				Soil	
				CT Laboratories	
				9/12/2016	
				10:45	
Compound	CAS #	Analytical Method	Regulatory Levels	Value	Tt Qualifier
PCBs (ug/kg)					
Aroclor-1016	12674-11-2	EPA SW8082	12000	ND	U
Aroclor-1221	11104-28-2	EPA SW8082	20000	ND	U
Aroclor-1232	11141-16-5	EPA SW8082	17000	ND	U
Aroclor-1242	53469-21-9	EPA SW8082	23000	ND	U
Aroclor-1248	12672-29-6	EPA SW8082	23000	ND	U
Aroclor-1254	11097-69-1	EPA SW8082	3500	7,760	
Aroclor-1260	11096-82-5	EPA SW8082	24000	ND	U
Aroclor-1262	37324-23-5	EPA SW8082	NC	ND	U
Aroclor-1268	11100-14-4	EPA SW8082	NC	ND	U
VOC's (mg/L)					
1,1-Dichloroethene	75-35-4	EPASW8260C	0.7	ND	U
1,2-Dichloroethane	107-06-2	EPASW8260C	0.5	ND	U
2-Butanone	78-93-3	EPASW8260C	NC	ND	U
Benzene	71-43-2	EPASW8260C	0.5	ND	U
Carbon tetrachloride	56-23-5	EPASW8260C	0.5	ND	U
Chlorobenzene	108-90-7	EPASW8260C	100	ND	U
Chloroform	67-66-3	EPASW8260C	6	ND	U
Tetrachloroethene	127-18-4	EPASW8260C	0.7	ND	U
Trichloroethene	79-01-6	EPASW8260C	0.5	ND	U
Vinyl chloride	75-01-4	EPASW8260C	0.2	ND	U
SVOC's (mg/L)					
1,4-Dichlorobenzene	106-46-7	EPA SW8070D	7.5	ND	U
2,4,5-Trichlorophenol	95-95-4	EPA SW8070D	400	ND	U
2,4,6-Trichlorophenol	88-06-2	EPA SW8070D	2	ND	U
2,4-Dinitrotoluene	121-14-2	EPA SW8070D	0.13	ND	U
2-Methylphenol	95-48-7	EPA SW8070D	NC	ND	U
3 & 4-Methylphenol	1319-77-3	EPA SW8070D	NC	ND	U
Hexachlorobenzene	118-74-1	EPA SW8070D	0.13	ND	U
Hexachlorobutadiene	87-68-3	EPA SW8070D	0.5	ND	U
Hexachloroethane	67-72-1	EPA SW8070D	3	ND	U
Pentachlorophenol	87-86-5	EPA SW8070D	100	ND	U
Pyridine	110-86-1	EPA SW8070D	5	ND	U
Metals (mg/L)					
Arsenic	7440-38-2	EPA SW 6010	5	0.016	J
Barium	7440-39-3	EPA SW 6010	100	1.2	
Cadmium	7440-43-9	EPA SW 6010	1	160	
Chromium	7440-47-3	EPA SW 6010	5	0.019	
Lead	7439-92-1	EPA SW 6010	5	0.081	
Mercury	7439-97-6	EPA SW 6010	0.2	ND	U
Nitrobenzene	98-95-3	EPA SW 6010	2	ND	U
Selenium	7782-49-2	EPA SW 6010	1	0.016	
Silver	7440-22-4	EPA SW 6010	5	ND	U
Reactivity, Corrosivity, & Ignitability					
pH	PH	SW9045	≤2 or ≥12.5 S.U.*	7.41	
Cyanide, Reactive	57-12-5	SW7.3	N/A	ND	U
Sulfide, Reactive	18496-25-8	SW7.3	N/A	ND	U
Flashpoint	FLASHPT	SW1010	<140 °F**	>140	

Notes:

J= Estimated Value.

ug/kg = microgram per kilogram

mg/L = milligram per liter

ND= Non Detect

PCB = Polychlorinated biphenyls

TCLP = Toxicity Characteristic Leaching Procedure

U = Analyte concentration was not above detection level.

Value = Analyte Result (ug/kg for PCB results and mg/L for TCLP and corrosivity results)

-The Regulatory Levels above can be located at <https://www.law.cornell.edu/cfr/text/40/261.24>

*=Regulation from EPA Title 40 CFR 261.22 Characteristic of corrosivity <<https://www.law.cornell.edu/cfr/text/40/261.22>>

**=Regulation from EPA Title 40 CFR 261.21 Characteristic of ignitability <<https://www.law.cornell.edu/cfr/text/40/261.21>>

Table 8: Bulk Asbestos Samples
Asbestos Sample Results Table (BA-01 to 15)
Internet/Wagner Castings

EPA/START Sample No.	Sample Date	Sample Time	Sample Type	Field Sample Description	Lab Sample Description	Lab Analytical Method	Sample Location	Friable	Condition	Chrysotile Asbestos %	NESHAAP Classification
IW-BA-01	9/6/2016	1140	Investigative	green mastic floor tile	brown/green/beige non-fibrous homogeneous	600/R-93/116	located throughout debris piles		Damaged	10	RACM
IW-BA-01	9/6/2016	1140	Investigative	green mastic floor tile	black nonfibrous homogeneous	600/R-93/116	located throughout debris piles		Damaged	3	RACM
IW-BA-02	9/6/2016	1142	Investigative	floor tile with paper backing	black fibrous homogeneous	600/R-93/116	located throughout debris piles		Damaged	3	RACM
IW-BA-03	9/6/2016	1152	Investigative	streaked mastic floor tile	tan non-fibrous homogeneous	600/R-93/116	east pile adjacent to office building		Damaged	0	NA
IW-BA-03	9/6/2016	1152	Investigative	streaked mastic floor tile	black/silver non-fibrous homogeneous	600/R-93/116	east pile adjacent to office building		Damaged	0	NA
IW-BA-04	9/6/2016	1153	Investigative	white mastic tile	tan non-fibrous homogeneous	600/R-93/116	east pile adjacent to office building		Damaged	0	NA
IW-BA-04	9/6/2016	1153	Investigative	white mastic tile	black non-fibrous homogeneous	600/R-93/116	east pile adjacent to office building		Damaged	0	NA
IW-BA-05	9/6/2016	1200	Investigative	tar roofing paper	brown/black fibrous homogeneous	600/R-93/116	brick pile adjacent to office building		Damaged	0	NA
IW-BA-05	9/6/2016	1200	Investigative	tar roofing paper	brown/black non-fibrous homogeneous	600/R-93/116	brick pile adjacent to office building		Damaged	0	NA
IW-BA-06	9/6/2016	1234	Investigative	flooring	tan/white/blue fibrous homogeneous	600/R-93/116	west-most pile		Damaged	0	NA
IW-BA-07	9/6/2016	1236	Investigative	unknown woven fiber with adhesive	brown/clear fibrous homogeneous	600/R-93/116	west-most pile		Damaged	0	NA
IW-BA-07	9/6/2016	1236	Investigative	unknown woven fiber with adhesive	beige non-fibrous homogeneous	600/R-93/116	west-most pile		Damaged	0	NA
IW-BA-08	9/6/2016	1315	Investigative	red brown mastic floor tile	rust non-fibrous homogenous	600/R-93/116	top floor of office building		Damaged	15	RACM
IW-BA-08	9/6/2016	1315	Investigative	red brown mastic floor tile	black non-fibrous homogeneous	600/R-93/116	top floor of office building		Damaged	4	RACM
IW-BA-09	9/6/2016	1326	Investigative	black mastic floor tile	brown/white/red non-fibrous homogeneous	600/R-93/116	top floor of office building		Damaged	8	RACM
IW-BA-09	9/6/2016	1326	Investigative	black mastic floor tile	black non-fibrous homogeneous	600/R-93/116	top floor of office building		Damaged	10	RACM
IW-BA-09	9/6/2016	1326	Investigative	black mastic floor tile	black fibrous homogeneous	600/R-93/116	top floor of office building		Damaged	0	NA
IW-BA-10	9/6/2016	1326	Investigative	drywall	tan/white fibrous heterogeneous	600/R-93/116	top floor of office building		Damaged	0	NA
IW-BA-11	9/6/2016	1330	Investigative	drywall/sheet rock	black non-fibrous homogeneous	600/R-93/116	top floor of office building		Damaged	0	NA
IW-BA-11	9/6/2016	1330	Investigative	drywall/sheet rock	gray/white non-fibrous homogeneous	600/R-93/116	top floor of office building		Damaged	0	NA
IW-BA-12	9/6/2016	1333	Investigative	ceiling tile with brown mastic	tan/white fibrous heterogeneous	600/R-93/116	top floor of office building		Damaged	0	NA
IW-BA-12	9/6/2016	1333	Investigative	ceiling tile with brown mastic	brown non-fibrous homogeneous	600/R-93/116	top floor of office building		Damaged	0	NA
IW-BA-12	9/6/2016	1333	Investigative	ceiling tile with brown mastic	gray non-fibrous homogeneous	600/R-93/116	top floor of office building		Damaged	0	NA
IW-BA-13	9/6/2016	1342	Investigative	pipe insulation	gray/white fibrous homogeneous	600/R-93/116	first floor of office building		Damaged	50	RACM
IW-BA-14	9/6/2016	1350	Investigative	composite debris	gray/beige fibrous homogeneous	600/R-93/116	first floor of office building		Damaged	0	NA
IW-BA-15	9/30/2016	1300	Investigative	composite debris	None	600/R-93/116	fire brick pit		Damaged	0	NA

Notes:

EPA = Environmental Protection Agency

START = Superfund Technical Assessment and Response Team

TSI = thermal system insulation

NESHAAP = National Emission Standards for Hazardous Air Pollutants

NA = Not Applicable

RACM = Regulated Asbestos Containing Material

**Table 9: Air Samples
Asbestos Air Samples
Intermet/Wagner Castings**

EPA/START Sample No.	Sample Date	Sample Type	Field Sample Description	Lab Analytical Method	Sample Location	Volume (liters)	Asbestos Concentration
IW-AS-001-092816	9/28/2016	Air	TEM Air Sampling Cassette 25mm	AHERA 40 CFR, Part 763	Air Monitoring Station 1	4888.02	ND
IW-AS-002-092816	9/28/2016	Air	TEM Air Sampling Cassette 25mm	AHERA 40 CFR, Part 763	Air Monitoring Station 2	3571.13	ND
IW-AS-003-092816	9/28/2016	Air	TEM Air Sampling Cassette 25mm	AHERA 40 CFR, Part 763	Air Monitoring Station 3	4434.24	ND
IW-AS-004-092816	9/28/2016	Air	TEM Air Sampling Cassette 25mm	AHERA 40 CFR, Part 763	Air Monitoring Station 4	4439.68	ND
IW-AS-004-092916	9/29/2016	Air	TEM Air Sampling Cassette 25mm	AHERA 40 CFR, Part 763	Air Monitoring Station 4	5161.2	ND
IW-AS-004-093016	9/30/2016	Air	TEM Air Sampling Cassette 25mm	AHERA 40 CFR, Part 763	Air Monitoring Station 4	5400.7	ND
IW-AS-001-100316	10/3/2016	Air	TEM Air Sampling Cassette 25mm	AHERA 40 CFR, Part 763	Air Monitoring Station 1	2620.34	ND
IW-AS-002-100316	10/3/2016	Air	TEM Air Sampling Cassette 25mm	AHERA 40 CFR, Part 763	Air Monitoring Station 2	2813.58	ND
IW-AS-003-100316	10/3/2016	Air	TEM Air Sampling Cassette 25mm	AHERA 40 CFR, Part 763	Air Monitoring Station 3	2381.66	ND
IW-AS-004-100316	10/3/2016	Air	TEM Air Sampling Cassette 25mm	AHERA 40 CFR, Part 763	Air Monitoring Station 4	2429.03	ND
IW-AS-001-100416	10/4/2016	Air	TEM Air Sampling Cassette 25mm	AHERA 40 CFR, Part 763	Air Monitoring Station 1	5755.34	ND
IW-AS-002-100416	10/4/2016	Air	TEM Air Sampling Cassette 25mm	AHERA 40 CFR, Part 763	Air Monitoring Station 2	5913.6	ND
IW-AS-003-100416	10/4/2016	Air	TEM Air Sampling Cassette 25mm	AHERA 40 CFR, Part 763	Air Monitoring Station 3	5419.05	ND
IW-AS-004-100416	10/4/2016	Air	TEM Air Sampling Cassette 25mm	AHERA 40 CFR, Part 763	Air Monitoring Station 4	5517.34	ND
IW-AS-001-100516	10/5/2016	Air	TEM Air Sampling Cassette 25mm	AHERA 40 CFR, Part 763	Air Monitoring Station 1	4444.2	ND
IW-AS-002-100516	10/5/2016	Air	TEM Air Sampling Cassette 25mm	AHERA 40 CFR, Part 763	Air Monitoring Station 2	4715.73	ND
IW-AS-003-100516	10/5/2016	Air	TEM Air Sampling Cassette 25mm	AHERA 40 CFR, Part 763	Air Monitoring Station 3	4431.53	ND
IW-AS-004-100516	10/5/2016	Air	TEM Air Sampling Cassette 25mm	AHERA 40 CFR, Part 763	Air Monitoring Station 4	4443.75	ND
IW-AS-001-100616	10/6/2016	Air	TEM Air Sampling Cassette 25mm	AHERA 40 CFR, Part 763	Air Monitoring Station 1	5617.24	ND
IW-AS-002-100616	10/6/2016	Air	TEM Air Sampling Cassette 25mm	AHERA 40 CFR, Part 763	Air Monitoring Station 2	5791.34	ND
IW-AS-003-100616	10/6/2016	Air	TEM Air Sampling Cassette 25mm	AHERA 40 CFR, Part 763	Air Monitoring Station 3	5466.01	ND
IW-AS-004-100616	10/6/2016	Air	TEM Air Sampling Cassette 25mm	AHERA 40 CFR, Part 763	Air Monitoring Station 4	5608.32	ND

Notes:

EPA = Environmental Protection Agency

START = Superfund Technical Assessment and Response Team

TSI = thermal system insulation

NESHAAP = National Emission Standards for Hazardous Air Pollutants

NA = Not Applicable

APPENDIX C
PHOTOGRAPHIC DOCUMENTATION

PHOTOGRAPHIC LOG

US EPA R5 START - 103X90260001S051606403
Intermet/Wagner Site Assessment and Removal
DECATUR, MACON COUNTY, ILLINOIS

Photograph: 1

Direction: South

Date: 8/16/2016

Photographer:
Cordell Renner

Description:
View of
Intermet/Wagner
Castings Facility



Photograph: 2

Direction: West

Date: 8/16/2016

Photographer:
Cordell Renner

Description:
View of ACM debris
pile on site.



PHOTOGRAPHIC LOG

US EPA R5 START - 103X90260001S051606403

Intermet/Wagner Site Assessment and Removal

DECATUR, MACON COUNTY, ILLINOIS

Photograph: 3

Direction: Southwest

Date: 8/16/2016

Photographer:
Cordell Renner

Description:
View of ACM debris
piles on site.



Photograph: 4

Direction: South

Date: 8/16/2016.

Photographer:
Cordell Renner

Description:
View of ACM debris
piles on site.



PHOTOGRAPHIC LOG

US EPA R5 START - 103X90260001S051606403
Intermet/Wagner Site Assessment and Removal
DECATUR, MACON COUNTY, ILLINOIS

Photograph: 5

Direction: West

Date: 8/16/2016

Photographer:
Cordell Renner

Description:
View of full and empty fire extinguishers on site.



Photograph: 6

Direction: West

Date: 8/16/2016

Photographer:
Cordell Renner

Description:
View of PCB and Non-PCB capacitors on site.



PHOTOGRAPHIC LOG

US EPA R5 START - 103X90260001S051606403

Intermet/Wagner Site Assessment and Removal

DECATUR, MACON COUNTY, ILLINOIS

Photograph: 7

Direction: N/A

Date: 8/16/2016

Photographer:
Cordell Renner

Description:
View of capacitors
labeled as Non-PCB
containing.



Photograph: 8

Direction: N/A

Date: 8/16/2016

Photographer:
Cordell Renner

Description:
View of sample location
for sample OS-SS-03.
START collected
sample using a plastic
scoop.



PHOTOGRAPHIC LOG

US EPA R5 START - 103X90260001S051606403

Intermet/Wagner Site Assessment and Removal

DECATUR, MACON COUNTY, ILLINOIS

Photograph: 9

Direction: N/A

Date: 8/16/2016

Photographer:
Cordell Renner

Description:

View of staining underneath the PCB capacitors. A wipe sample was collected from the stained area.



Photograph: 10

Direction: Southwest

Date: 8/16/2016

Photographer:
Cordell Renner

Description:

View of office building where ACM was found.



PHOTOGRAPHIC LOG

US EPA R5 START - 103X90260001S051606403

Intermet/Wagner Site Assessment and Removal

DECATUR, MACON COUNTY, ILLINOIS

Photograph: 11

Direction: South

Date: 8/16/2016

Photographer:
Cordell Renner

Description:
View of debris pile in
office building.



Photograph: 12

Direction: South

Date: 8/16/2016

Photographer:
Cordell Renner

Description:
View of former
electrical transformer
stand. PCB wipe
samples were collected
underneath the stand.



PHOTOGRAPHIC LOG

US EPA R5 START - 103X90260001S051606403

Intermet/Wagner Site Assessment and Removal

DECATUR, MACON COUNTY, ILLINOIS

Photograph: 13

Direction: N/A

Date: 8/16/2016

Photographer:
Cordell Renner

Description:

View of former sand holding tank for the foundry. A radiation assessment was conducted on tank.



Photograph: 14

Direction: North

Date: 8/16/2016

Photographer:
Cordell Renner

Description:

View of drain plug for the former plating facility on site.



PHOTOGRAPHIC LOG

US EPA R5 START - 103X90260001S051606403

Intermet/Wagner Site Assessment and Removal

DECATUR, MACON COUNTY, ILLINOIS

Photograph: 15

Direction: East

Date: 8/16/2016

Photographer:
Cordell Renner

Description:
View of drum waste
storage building.



Photograph: 16

Direction: South

Date: 8/16/2016

Photographer:
Cordell Renner

Description:
View of saddle tank
holders. Soil was
sampled around the
holders.



PHOTOGRAPHIC LOG

US EPA R5 START - 103X90260001S051606403
Intermet/Wagner Site Assessment and Removal
DECATUR, MACON COUNTY, ILLINOIS

Photograph: 17

Direction: N/A

Date: 9/6/2016

Photographer:
Cordell Renner

Description:
View of AST's on site.
Tanks were sampled by
START.



Photograph: 18

Direction: East

Date: 9/6/2016

Photographer:
Cordell Renner

Description:
View of START
sampling AST.



PHOTOGRAPHIC LOG

US EPA R5 START - 103X90260001S051606403
Intermet/Wagner Site Assessment and Removal
DECATUR, MACON COUNTY, ILLINOIS

Photograph: 19

Direction: N/A

Date: 9/7/2016

Photographer:
Cordell Renner

Description:
View of START
collecting a PCB wipe
sample around one of
the Galbestos sided
buildings.



Photograph: 20

Direction: N/A

Date: 9/7/2016

Photographer:
Cordell Renner

Description:
View of START
collecting a PCB wipe
sample in a former PCB
storage area.



PHOTOGRAPHIC LOG

US EPA R5 START - 103X90260001S051606403

Intermet/Wagner Site Assessment and Removal

DECATUR, MACON COUNTY, ILLINOIS

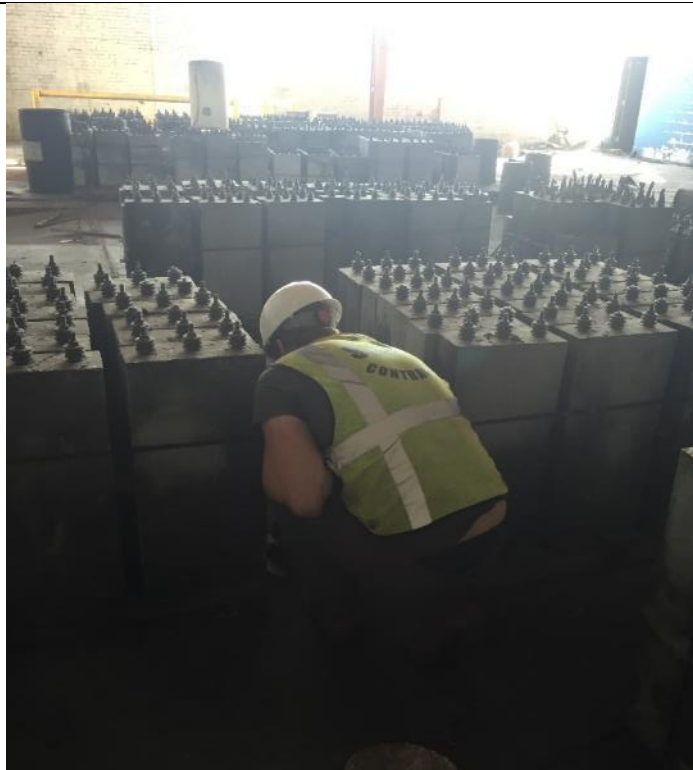
Photograph: 21

Direction: N/A

Date: 9/7/2016

Photographer:
Cordell Renner

Description:
View of START
collected a PCB wipe
sample from a stained
around the capacitors.



Photograph: 22

Direction: N/A

Date: 9/7/2016

Photographer:
Cordell Renner

Description:
View of START
collecting a bulk sample
from a drum with a
leaking PCB transformer
inside.



PHOTOGRAPHIC LOG

US EPA R5 START - 103X90260001S051606403

Intermet/Wagner Site Assessment and Removal

DECATUR, MACON COUNTY, ILLINOIS

Photograph: 23

Direction: N/A

Date: 9/7/2016

Photographer:
Cordell Renner

Description:

View of leaking PCB capacitor inside of a drum.



Photograph: 24

Direction: N/A

Date: 9/8/2016

Photographer:
Cordell Renner

Description:

View of START dressed out in Level B for unknown drum sampling.



PHOTOGRAPHIC LOG

US EPA R5 START - 103X90260001S051606403
Intermet/Wagner Site Assessment and Removal
DECATUR, MACON COUNTY, ILLINOIS

Photograph: 25

Direction: N/A

Date: 9/8/2016

Photographer:
Cordell Renner

Description:
View of START
sampling unknown
drums.



Photograph: 26

Direction: North

Date: 9/9/2016

Photographer:
Cordell Renner

Description:
View of break room
connected to the
engineering building.
Elemental mercury was
found inside the break
room.



PHOTOGRAPHIC LOG

US EPA R5 START - 103X90260001S051606403

Intermet/Wagner Site Assessment and Removal

DECATUR, MACON COUNTY, ILLINOIS

Photograph: 27

Direction: N/A

Date: 9/9/2016

Photographer:
Cordell Renner

Description:
View of START using a
Lumex to screen for
mercury vapors inside
break room.



Photograph: 28

Direction: N/A

Date: 9/9/2016

Photographer:
Cordell Renner

Description:
View of mercury beads
along a crack in the
break room.



PHOTOGRAPHIC LOG

US EPA R5 START - 103X90260001S051606403
Intermet/Wagner Site Assessment and Removal
DECATUR, MACON COUNTY, ILLINOIS

Photograph: 29

Direction: Northeast

Date: 9/9/2016

Photographer:
Cordell Renner

Description:
View of START
collecting a soil sample
at the base of a leaking
transformer.



Photograph: 30

Direction: North

Date: 9/12/2016

Photographer:
Cordell Renner

Description:
View of unknown drums
being laid out on poly to
be HAZCATTED by
ERRS.



PHOTOGRAPHIC LOG

US EPA R5 START - 103X90260001S051606403

Intermet/Wagner Site Assessment and Removal

DECATUR, MACON COUNTY, ILLINOIS

Photograph: 31

Direction: N/A

Date: 9/13/2016

Photographer:
Cordell Renner

Description:
View of mercury beads
in break room.



Photograph: 32

Direction: N/A

Date: 9/13/2016

Photographer:
Cordell Renner

Description:
View of elemental
mercury source. Two
“Type S Tank-O-
Meters” which contained
elemental mercury were
broken open, spilling the
mercury into the break
room.



PHOTOGRAPHIC LOG

US EPA R5 START - 103X90260001S051606403

Intermet/Wagner Site Assessment and Removal

DECATUR, MACON COUNTY, ILLINOIS

Photograph: 33

Direction: N/A

Date: 9/13/2016

Photographer:
Cordell Renner

Description:

View of removed drain plug from the drain line of the former plating facility.



Photograph: 34

Direction: N/A

Date: 9/14/2016

Photographer:
Cordell Renner

Description:

View of ERRS using a mercury vacuum to clean up mercury beads in the break room.



PHOTOGRAPHIC LOG

US EPA R5 START - 103X90260001S051606403
Intermet/Wagner Site Assessment and Removal
DECATUR, MACON COUNTY, ILLINOIS

Photograph: 35

Direction: N/A

Date: 9/14/2016

Photographer:
Cordell Renner

Description:
View of ERRS chemist
conducting
HAZCATTING on
unknown drums.



Photograph: 36

Direction: Northeast

Date: 9/19/2016

Photographer:
Cordell Renner

Description:
View of mercury waste
from the break room.
Waste was stored in UN
boxes or plastic
overpacks.



PHOTOGRAPHIC LOG

US EPA R5 START - 103X90260001S051606403
Intermet/Wagner Site Assessment and Removal
DECATUR, MACON COUNTY, ILLINOIS

Photograph: 37

Direction: Southwest

Date: 9/19/2016

Photographer:
Cordell Renner

Description:

View of break room post clean-up. The debris was removed, floor scrubbed, and drains/cracks cemented.



Photograph: 38

Direction: North

Date: 9/19/2016

Photographer:
Cordell Renner

Description:

View of ERRS removing debris from the office building.



PHOTOGRAPHIC LOG

US EPA R5 START - 103X90260001S051606403

Intermet/Wagner Site Assessment and Removal

DECATUR, MACON COUNTY, ILLINOIS

Photograph: 39

Direction: N/A

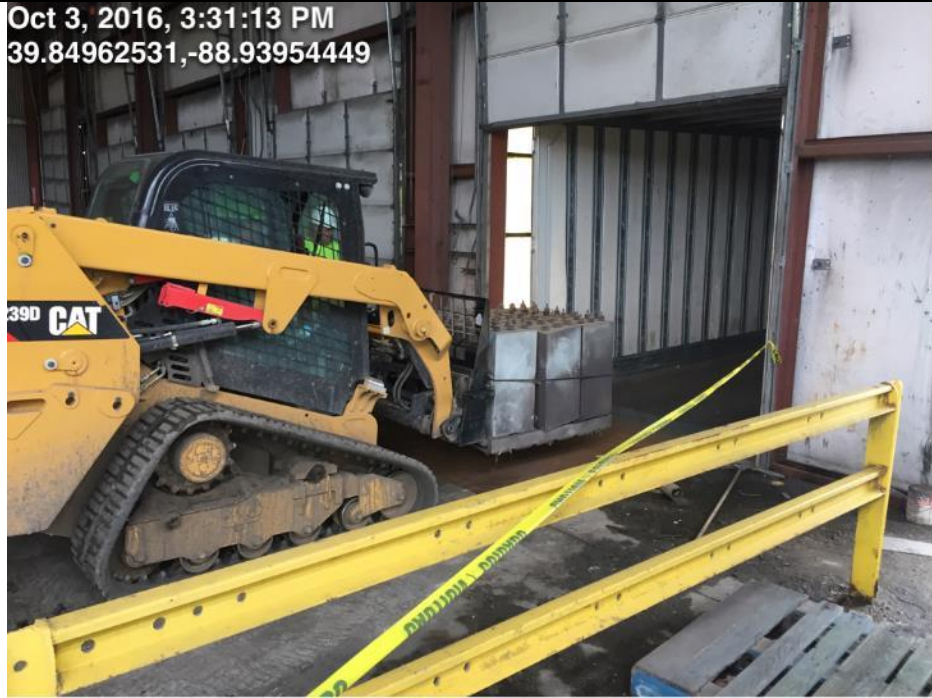
Date: 10/3/2016

Photographer:
Cordell Renner

Description:

View of PCB capacitors being loaded onto a box truck for disposal.

Oct 3, 2016, 3:31:13 PM
39.84962531,-88.93954449



Photograph: 40

Direction: N/A

Date: 10/3/2016

Photographer:
Cordell Renner

Description:

View of ERRS preparing drums with PCB waste to be loaded.

Oct 3, 2016, 3:38:42 PM
39.84959874,-88.93989972



PHOTOGRAPHIC LOG

US EPA R5 START - 103X90260001S051606403

Intermet/Wagner Site Assessment and Removal

DECATUR, MACON COUNTY, ILLINOIS

Photograph: 41

Direction: West

Date: 10/3/2016

Photographer:
Cordell Renner

Description:

View after first box truck was loaded with PCB and Non-PCB waste.

Oct 3, 2016, 4:11:30 PM
39.84967262,-88.93967307



Photograph: 42

Direction: N/A

Date: 10/3/2016

Photographer:
Cordell Renner

Description:

View of loaded box truck with PCB waste.

Oct 3, 2016, 4:13:36 PM
39.84979626,-88.93981221



PHOTOGRAPHIC LOG

US EPA R5 START - 103X90260001S051606403
Intermet/Wagner Site Assessment and Removal
DECATUR, MACON COUNTY, ILLINOIS

Photograph: 43

Direction: N/A

Date: 10/4/2016

Photographer:
Cordell Renner

Description:

View of ERRS cleaning out the drain line of the former plating facility.



Photograph: 44

Direction: Northwest

Date: 10/6/2016

Photographer:
Cordell Renner

Description:

View of ERRS backfilling the basement after ACM debris was removed.



PHOTOGRAPHIC LOG

US EPA R5 START - 103X90260001S051606403
Intermet/Wagner Site Assessment and Removal
DECATUR, MACON COUNTY, ILLINOIS

Photograph: 45

Direction: East

Date: 10/11/2016

Photographer:
Cordell Renner

Description:
View of trucks being
loaded with ACM
debris.

Oct 11, 2016, 9:08:22 AM
39.84938785,-88.93337479



Photograph: 46

Direction: North

Date: 10/11/2016

Photographer:
Cordell Renner

Description:
View of basement
backfilling and an ACM
debris load out pile.

Oct 11, 2016, 10:13:42 AM
39.84937146,-88.93338335



PHOTOGRAPHIC LOG

US EPA R5 START - 103X90260001S051606403

Intermet/Wagner Site Assessment and Removal

DECATUR, MACON COUNTY, ILLINOIS

Photograph: 47

Direction: Northeast

Date: 10/4/2016

Photographer:
Cordell Renner

Description:

View of ERRS lining a truck with plastic before being loaded with ACM debris.



Photograph: 48

Direction: North

Date: 10/4/2016

Photographer:
Cordell Renner

Description:

View of a truck being "burrito wrapped" after being loaded with ACM debris.



PHOTOGRAPHIC LOG

US EPA R5 START - 103X90260001S051606403

Intermet/Wagner Site Assessment and Removal

DECATUR, MACON COUNTY, ILLINOIS

Photograph: 49

Direction: N/A

Date: 10/11/2016

Photographer:
Cordell Renner

Description:
View of ERRS sealing
the drain line with
concrete.

Oct 11, 2016, 2:19:30 PM
39.84956969, -88.93378213



Photograph: 50

Direction: N/A

Date: 10/12/2016

Photographer:
Cordell Renner

Description:
View of UN boxes filled
with debris and foundry
sand from the drum
waste building.

Oct 12, 2016, 2:18:00 PM
39.85115512, -88.93602354



PHOTOGRAPHIC LOG

US EPA R5 START - 103X90260001S051606403
Intermet/Wagner Site Assessment and Removal
DECATUR, MACON COUNTY, ILLINOIS

Photograph: 51

Direction: N/A

Date: 10/14/2016

Photographer:
Cordell Renner

Description:
View after backfilling
was completed of the
basement.

Oct 14, 2016, 8:25:25 AM
39.84938735,-88.93936085



Photograph: 52

Direction: East

Date: 10/19/2016

Photographer:
Cordell Renner

Description:
View of unknown drums
being overpacked for
disposal.

Oct 19, 2016, 1:53:57 PM
39.84808077,-88.93504718



PHOTOGRAPHIC LOG

US EPA R5 START - 103X90260001S051606403

Intermet/Wagner Site Assessment and Removal

DECATUR, MACON COUNTY, ILLINOIS

Photograph: 53

Direction: West

Date: 10/20/2016

Photographer:
Cordell Renner

Description:

View of ERRS cleaning
PCB staining in the
former PCB capacitor
storage area.

Oct 20, 2016, 10:46:16 AM
39.84779524,-88.94476115



Photograph: 54

Direction: Southwest

Date: 10/21/2016

Photographer:
Cordell Renner

Description:

View of asbestos
abatement team for the
office building.

Oct 21, 2016, 12:34:34 PM
39.84910450,-88.94013005



APPENDIX D
START FIELD NOTES

Name Internet/Wagner
103X902600015051606403
 Address 1275 Sangamon Street
Decatur, IL
 Phone _____

Logbook Tracking Number CH151
Site Name Intermet/Wagner Castings R/V
Issue to Cordell Bennier
Date Issued 9-15-16
TDD # 0001-1606-403



CONTENTS

[illegible]

9-6-16

1000

1100 - START (RENNER, SCHULTZ, McCARRELL & BAKER) & EPA (CRAG THOMAS) ON SITE. DISCUSS SCOPE OF WORK FOR TODAY. SITE ACTIVITIES: ① ASBESTOS CONTAINING MATERIALS (ACM) PILES WILL BE EVALUATED & SAMPLED BY START. SEVEN (7) PILES OF DEBRIS WILL BE SAMPLED. ② INDOOR AIR SCREENING WILL BE COMPLETED, ANALYZING FOR MERCURY VAPORS USING A LUMEX RA-915+, BREATHING ZONE PDA SCREENING USING A MULTIRAE PRO, & RADIATION SCREENING USING A LUDLUM 192. FOR INITIAL GAMMA SCREENING & FOLLOWING UP WITH A LUDLUM 2241 W/ PANCAKE PROBE DETECTOR ATTACHED IF ELEVATED LEVELS ARE DETECTED W/ THE 192.

1115 - START (BAKER) BEGINS ANALYZING POTENTIAL ACM DEBRIS PILES & SAMPLING.

1222 - START Remer performed test check on Lumex (R% value of 17%)

1225 - BEGIN INDOOR AIR SCREENING

1235 - MULTIPLE LOCATIONS FOUND INSIDE

9-6-16

1000

BUILDING WHERE PCB WIPE SAMPLES WERE REQUESTED BY EPA. "PCB STORAGE AREA" & "HAVANA SAMPLE AREA". AREA BY OIL SOXES & FIRE EXTINGUISHER.

1255 - START Remer & McCarrell scanned the Foundry sand tank w/ the Ludlum RAD monitors. No hits discovered.

1330 - START completed screening of building on west side of site, no detections on Multirae, Lumex, or Ludlum.

1350 - MINO-AL in the waste storage building @ 2100 R/hr & SCOTT - RAM

1400 - START (BAKER) LEAVES SITE. WILL DROP OFF SAMPLES COLLECTED TODAY AT FEDEX TO BE PRIORITY OVERNIGHTED TO CT LABORATORIES.

1405 - SITE WALK W/ EPA TO INSPECT 3 AST'S. KNOW THERE IS LIQUID W/ AT LEAST ONE.

1500 - START (RENNER, SCHULTZ, & McCARRELL & EPA (THOMAS) LEAVE SITE.

9-6-16

0700 - START (RENNER, SCHULTZ, & MCCARRELL)
EPA (THOMAS), & ERRS (4 TOTAL) ON
SITE. ACTIVITIES PLANNED TODAY:
- ERRS WILL STAGE EQUIPMENT.
- TWO SITE TRAILERS BROUGHT IN.
- SOIL SAMPLING, FOUNDRY SAND
SAMPLING, & PCB WIPE SAMPLING
COMPLETED BY START.

WEATHER: HIGH OF 93°F TODAY, SUNNY, WIND
SSW @ 8 MPH, 20% CHANCE OF RAIN

0705 - DAILY SAFETY TAILGATE, AIR
MONITORING ON 9-6-16 CAME BACK
SAFE, H₂ & RAD DO NOT APPEAR TO
BE ISSUES ON SITE.

0815 - START SETS UP FOR PCB WIPE SAMPLING.

TIME	SAMPLE ID	SAMPLES
0820	IW-WO-01	IW-WO-01 THROUGH IW-WO-16 ARE LOCATED AROUND THE PERIMETER OF THE GALSBESTOS SIDED BUILDINGS. SW CORNER OF THE SITE.
0825	IW-WO-02	
0830	IW-WO-03	
0835	IW-WO-04	
0840	IW-WO-05	
0845	IW-WO-06	
0850	IW-WO-07	
0855	IW-WO-08	
0900	IW-WO-09	

TIME	SAMPLE ID
0905	IW-WO-10
0910	IW-WO-11
0915	IW-WO-12
0920	IW-FB-01
0925	IW-WO-13
0930	IW-WO-14
0935	IW-WO-15
0940	IW-WO-16

*1000	FW-WO-17	- PCB STORAGE AREA
*1005	IW-WO-18	- HAVANA SAMPLE AREA
*1010	IW-WO-19	- LOCATED BY USED SACKS
*1015	IW-WO-20	- LOCATED BY PCB DRUMS & TRANSFORMERS
1020	IW-WO-21	- BY OVERHEAD DOORS NEXT TO NON-PCB TRANSFORMERS

SAMPLES IW-WO-17 THROUGH IW-WO-21
ARE LOCATED INSIDE THE BUILDING WHERE
THE TRANSFORMERS ARE STAGED ON PALLETS.

1025 - START PREPARES TO COLLECT
PCB OIL BULK SAMPLES

1040 - COLLECT IW-BO-01. SAMPLED
FROM OPEN STEEL 55 GALLON
DRUM W/ A TRANSFORMER
STAGED IN IT.

1100 - LUNCH

* - DESIGNATES A LOCATION WHERE A DUPLICATE HAS
BEEN COLLECTED
** - DESIGNATES A LOCATION WHERE A MEIEMD WAS COLLECTED

WEDNESDAY
9-7-16

1200 - PREP FOR SURFACE SOIL SAMPLING.

TIME	SAMPLE ID	
1230	IW-SS-01	SAMPLES IW-SS-01
1235	IW-SS-02	THROUGH IW-SS-11
1240	IW-SS-03	WERE COLLECTED AROUND
1245	IW-SS-04	THE PERIMETER OF
1250	IW-SS-05	THE FALSBESTOS SIDED
1255	IW-SS-06	BUILDINGS & WILL BE
1300	IW-SS-07	ANALYZED FOR PCBs
1305	IW-SS-08	ONLY.
1310	IW-SS-09	
1315	IW-SS-10 - DUPLICATE	
1320	IW-SS-11 - DUPLICATE & MS/MSD	

1345 - START PREPARES TO COLLECT BOUNDARY
SAND & SOLIDS SAMPLES FROM THE
WASTE STORAGE BUILDING.

TIME	SAMPLE ID	
1400	IW-FS-01 - DUPLICATE	
1405	IW-FS-02	
1410	IW-FS-03	
1415	IW-SO-01 - GREEN SOLID MATERIAL FOUND ON FLOOR & IN BAGS ON PALLET IN WASTE STORAGE FACILITY	

1420 - PREP FOR SS SAMPLE COLLECTION BY
K5000 FILTER SOCKET & FORMER
SADDLE TANK AREA.

WEDNESDAY 7
9.7.16

TIME	SAMPLE ID	
1430	IW-SS-12 - DUPLICATE & MS/MSD	
1435	IW-SS-13	SAMP
1440	IW-SS-14	
1445	IW-SS-15	KS
1450	IW-SS-16	KS

1500 - SITE WALK TO ASSESS FOR ANY
ADDITIONAL SAMPLING LOCATIONS.
NONE FOUND.

1530 - PACK COOLERS W/ SAMPLES
FOR SHIPPING.

1630 - START LEAVES SITE.

1645 - DROP SAMPLES AT FEDEX.

Kel Self
9-7-16

0700 - START (RENNER, SCHULTZ, & MCCARRELL), EPA (THOMAS), & ERRE (4 TOTAL) ON SITE. SITE ACTIVITIES TODAY:

- ERRE - CONSOLIDATE CHEMICALS IN THE BUILDINGS
- START - SAMPLE FROM UNKNOWN DRUMS & SUIT UP IN LEVEL B
- START - MATT VILICANA WILL BE SETTING UP DATARAMS OR DUSTTRACKS AND VIPER ON SITE TODAY.
- START - SAMPLE ASTS.

WEATHER - HIGH OF 84°F, CURRENTLY RAINING, CHANCE OF THIS CONTINUING UNTIL NOON, WIND SW @ 8 MPH.

0730 - SCBA CHECK & STAGING EQUIPMENT FOR UNKNOWN DRUM SAMPLING.

0800 - START (VILICANA) ARRIVES ON SITE TO SET UP VIPER.

0900 - ERRE IS STAGING PCB DRUMS IN WASTE STORAGE BUILDING.

1000 - START IS SUITING UP IN LEVEL B TO COMPLETE UNKNOWN DRUM SAMPLING.

TIME	SAMPLE ID	% ppm	ppm	%	ppm
1040	IW-DR-02	249	665	499	47
1050	IW-DR-05		1.0		
	IW-DR-04		1.0		
	IW-DR-03		1.0		
1050	IW-DR-06	249	413.3	148	12
	IW-DR-07		2.0		
	IW-DR-08		0.0		
1100	IW-DR-09	249	0.0	-	-
	IW-DR-10		0.5		
	IW-DR-11		0.0		
	IW-DR-12		1.0		

DRUM ID % FULL

Drum 1	80
2	15
3	<5
4	80
5	70
6	50
7	90
8	<5
9	70
10	80
11	<5
12	10

SAMPLES COLLECTED FROM DRUMS IW-DR-02, IW-DR-04 & IW-DR-09. THE OTHER DRUMS DID NOT REGISTER SIGNIFICANT VOC READINGS.

1120 - COLLECT IW-SD-02. *Rite in the Rain*

THURSDAY
9-8-161200 - LUNCH1300 - PREP FOR 1ST SAMPLING.TIME SAMPLE ID

14:00 IW-AST-01

14:10 IW-AST-02

14:20 IW-AST-03

ONE AST ON SITE WAS EMPTY. FOUR
KNOWN AST'S ON SITE. SAMPLES COLLECTED
FROM THREE OUT OF FOUR.

1500 - TRIAL RUN OF VIPER SET UP &
PERIMETER MONITORING STATIONS
SELECTED.

1600 - START (SCHULTZ) DROPS OFF SAMPLES
AT FedEx.

1630 - START (RENNER, McCARRELL, SCHULTZ,
& VILLICANA) LEAVE SITE.

1700 - EPA (THOMAS) CALLS START (RENNER)
& STATES ERRS FOUND ELEMENTAL
Hg IN AN OLD LAB BUILDING. START
WILL SCREEN THE OLD LAB FIRST
THING TOMORROW.

INTERMET/WAGNER

FRIDAY
9-9-16

11

0700 - START (RENNER, McCARRELL, &
SCHULTZ), EPA (THOMAS), & ERRS
ON SITE. SITE ACTIVITIES TODAY:

- MERCURY ASSESSMENT IN THE
BUILDINGS THAT WERE PREVIOUSLY
UNACCESSIBLE. ERRS FOUND
VISIBLE ELEMENTAL MERC IN
ONE OF THEM YESTERDAY. (START)
- ERRS WILL CONTINUE TO CONSOLIDATE
CONTAINERS ON SITE.

• HES - WEAR PROPER PPE FOR
WORK BASED ON KNOWN HAZARDS

WEATHER - HIGH 81°F, OVERCAST, CHANCE
OF RAIN ALL DAY. WIND SW @ 5 MPH

0730 - START PREPARES TO SCREEN THE
OLD LAB W/ LUMEX 91ST FOR
MERCURY.

TIME	AREA	BZ	FZ
0742	FIRE EXTINGUISHER	0	0
0743	FRONT ENTRY	0.1	0.8
0744	FRONT ENTRY FLOOR ~ 5'	0.4	5.0
0745	VISIBLE Hg ON TABLES		
0748	MID ROOM	1.5	1.5
0753	BACK ROOM	1.5	1.2

Rite in the Rain

TIME	AREA	B2	F2
0803	ENTRY WAY	0	0
0803	FRONT HALLWAY	0	0
0804	LOCKER ROOM	0	0
0805	STORAGE ROOM	0	0
0807	BATHROOM	0	0

OFFICE BUILDING BY SITE TRAILERS

TIME	AREA	B2	F2
	Front Entryway		

PLANT ENGINEERING BUILDING

TIME	AREA	B2	F2
0830	FRONT ENTRY	0	0
0831	FRONT ROOM	0	0
0832	BACK ROOM 1	0	0
0834	BACK ROOM 2	0	0
0837	CLOSET	0	0
0840	FRONT OFFICE	0	0

1000 - IW-55-15 COLLECTED, WILL BE ANALYZED FOR PCBs

1015 - IW-55-16 COLLECTED, WILL BE ANALYZED FOR WASTE CHARACTERIZATION PARAMETERS.

1035 - Conducted Visual walkthrough of Office building by Site Trailers + Radiation screening. No radiation above background was found.

1100 - START Remer, Schultz, McCarrell complete work for the day, heading back to office to unload equipment.

9/12/2016 INTERNET/WAGNER CASTINGS

WEATHER: HIGH: 76°F WIND: SW 5 MPH SUNNY

0700 - START RENNERT & ERRS ON-SITE

0710 - Conduct H's MEETING & BRIEFING.

ERRS to remove the drain plug this morning & clean up oil dry in waste building. START to set up Dust Traps, screen office building w/ Lynex, and sample drain once

ERES removes the plug. — 1

0725: START begins to set up perimeter
air monitoring

0630: START completed air monitoring setup
Issue w/ DustTrak 4 with computer but
It was resolved

0845: START Renner conducts a screening of
other building w/ Lumex — a

0945: START completed screening. No breathing zone on floor zone mercury readings. Avg. Lvl. was $0.0 \mu\text{g}/\text{m}^3$

1000: EPA on site, START checked AM on equipment

1005: START to hotel to collect package!

1030: Start back on-site, OSC Thomas & ERKS would like a drum count w/ log.

9/2/2014

INTERMET & Wagner CASTINGS

SS gal	Barrels
Drums	
Empty	11 (11)
Liquid	11 (12)
Solid	11 (4)

1145: Completed drum & bucket count ——— a

1210: Lunch

1300: Return from lunch

1316- Draw layout for asbestos samples collected in the office building

1436- Off site to get Ice & zip-loc
bags for sample collected today

1500- Return to site, prep sample for shipment

~~1505 - Ellis~~

1630- Sample prepped, START begins to
take down AM equipment

1720-5141 OK-Site

Rite in the Rain

9/13/16 Internet/Wagner Casting

0700- Weather: High: 81°F Wind: WNW 6 mph

Sunny

0705- H&S meeting, Breeking on days work.

0730- START begins setting up AM

equipment, error w/ equipment.

START Foster is working on fixing it.

0815- START loads GPS points &

sent them off to create a figure

0930- EPA & START to measure piles for volume

1100- Completed pile measurement

Back Note: Owner came to pick up drum w/ herbicide in it, Jim Hoback @ 0945

0912/16 Backnote: Sample IW-DP-01 collected from

1045- Drain Plug by Start

1200- Lunch

1300- START on-site completes screening of Certing ducts in engineering building for mercury. EPA & START locate a possible source for mercury. 2 Type S Tank-O-Meters were found next to mercury.

1400- START to collect foundry sand sample

Cont. IW-FS-04

1445- ERRS mercury trailer on-site

1700- START collected AM Equipment

1730- START & ERRS off-site

Cancelled

9/14/16 Internet/Wagner Castings

0700- H&S meeting & Prekay, two main activities today are done
hazatly & sampling & mercury clean up.

0715- START calibrates Lurex & begins to set up AM equipment

0830- AM equipment set up. ERRS is setting up to begin mercury clean up

0845- ERRS begins vacuuming up elemental mercury

0850- START screened floor drain in engineering building by mercury spill. Drain pegged the Lurex >100 ug/m³. OR

Backnote: 0815 - EPA met w/ Eric Huddleston with the Lincoln County health department to provide information about the removal action

0950- ERRS Chemist Mark Douglas has prepped HAZCAT area in the waste warehouse, 27 drums & 10-20 buckets to be HAZCAT & sampled.

1030- Media & VIP start to arrive for press conference

1130- Press Conference begins OR

1150- ERRS begins to HAZCAT Drums

1310- ERRS done HAZCATING for the day. Will continue on 9/15

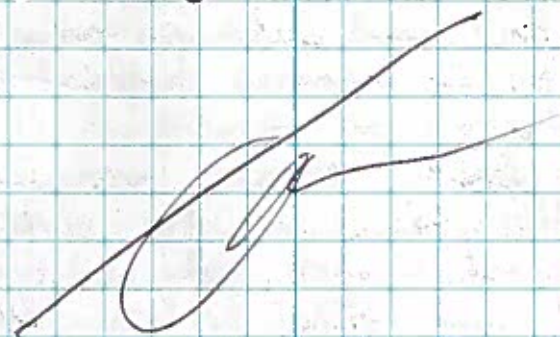
Backnote: 1230- START screened out ERRS workers coming out of the mercury hot zone, no issue

1430- EPA Requested an Emergency Contingency Plan OR

1530- No issue, w/ AM equipment

1700- START collected AM Equipment & screened out workers w/ Lurex

1730- Off-site



9/15/16 Internet/Wagner

- 0700 - HSS meeting and briefing, continue to clean up mercury & HAZCAT drums
- 0720 - START set up AM equipment & calibrated Lumer, R% = 5% — on
- 0750 - ERS is staging mercury debris boxes in the waste warehouse, 3 boxes so far. ERS is vacuuming mercury spill area & shoveling up the debris. — on
- 1000 - ERS Mark Douglas continues to sample & HAZCAT drums. — on
- 1050 - ERS removed grade @ the front of the mercury building — on
- 1100 - ERS took apart shelving unit & disposed of in mercury box — on
- 1500 - ERS ~~elemental~~ created a clean perimeter in mercury building — on
- 1600 - ERS torched the crack which contained elemental mercury — on
- 1700 - After ERS torched the crack they put NGX water solution on crack & on floor. START collected AM equipment & screened out ERS w/ Lumer — on
- 1730 off site — on

09/16/16 Internet/Wagner Castings

- 0700 - HSS meeting and briefing, move galbestos piles into debris piles, seal in mercury cracks w/ cement, continue to empty fire extinguishers.
- Weather: 78°F, NW 5 MPH, Rain
- 0730 - START set up AM Equipment around area where the fire extinguishers are being emptied. — on
- 0830 - START discovered another area w/ black 9x9 tiles. Area was GPSed — on
- 0900 - ERS begins to cement drain, grate area, & cracks in mercury building - each of these area had reading >100 ug/L. — on
- 1300 - ERS shoveled steps inside the office building & nailed boards to the top of the steps to prepare for abatement. — on
- 1430 - Inspected drums in PCB area, all drums contained capitors. — on
- 1545 - Collected AM equipment — on
- 1600 - Screened building w/ Lumer — on
- 1645 - ERS opened more drums in PCB area
- 1730 - ERS & START are off-site — on

9/19/16 Internet/Wagner Castings

Weather: 87°F high, 7 MPH W

0700 - H/S meeting & briefing of work to be done for the day. Continue to empty fire extinguishers & remove possible hazardous containers in the office building. ———— on

0830 - START set up AM equipment, no issues. ———— on

0830 - START collected a count of mercury boxes & drums, 6 boxes & 1 drum of mercury waste. ———— on

0900 - START screened mercury building, ~~area~~ Avg. level in building was $0.5 \mu\text{g}/\text{m}^3$, higher reading was from a small crack near the front door ($2.1 \mu\text{g}/\text{m}^3$). Areas that were concreted had below Avg. readings. ———— on

0930 - Areas that were concreted were main crack @ front of the building, 2 floor drains @ the front of the building, & grate area @ the entrance. ———— on

1030 - ERRS continued to empty out fire extinguishers. ———— on

1200 - Lunch. ———— on

1240 - Return from lunch. ———— on

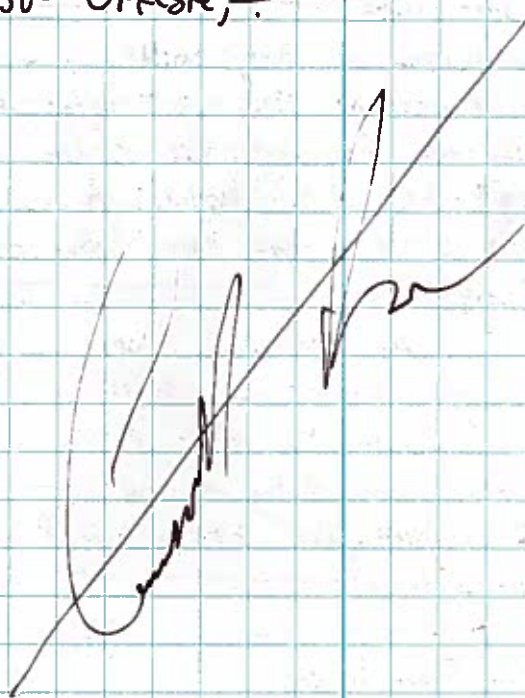
1310 - Mercury building has been fully addressed

& is no longer an observed hazard

1330 - The debris pile in the office building (first floor) was cleared out by ERRS. The windows were removed in order for the Bobcat to access the building then to remove debris. ———— on

1700 - Debris pile was removed & placed on load out pile. ———— on

1730 - Off-site. ———— on



9/20/2016 Internet/Wagne

0700- H&S meeting & work briefing for the day.

ERRS will continue to empty fire extinguishes
& clean up areas around the site ———

0730- START sets up 4 Dust Traps, no issues

0830- ERRS continues to empty out fire extinguishes

0900- Perform one more check on mercury building
w/ EPA. Building was cleaned. ———

1200- Lunch ———

1230- Return from lunch ———

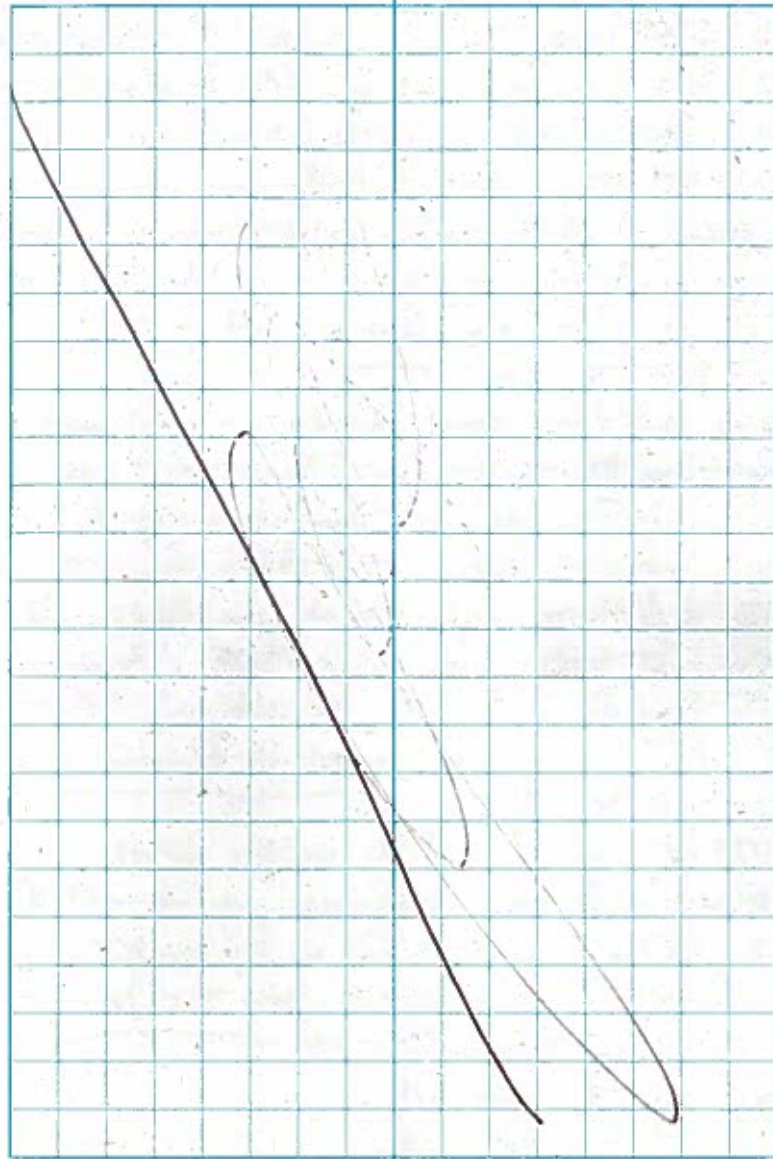
1300- ERRS continues to empty out fire
extinguishers ———

1430- ERRS sweeps up dust created from
emptying the fire extinguishes ———

1645- START collects the Dust Traps ———

1700- START ok - site ———

[Signature]



10/03/2016

Internet/Wagner III

- 0916- START (Renner) arrives on site — on
 0930- START begins to set up AM equipment — on
 1010- START completed cal & Set up for AM equipment — on

Backnote: 3 ACM Trucks loaded prior to START arrival, 1 broke down en route only 2 running for now — on

1001- EPA on-site — on

Backnote: 0830- ERRS opened bay door to build where the PCB capacitors are housed staged capacitors near bay door in order to have easy access to loading — on

1150- 2 ACM trucks returned & were loaded by ERRS

1155- First truck closed up, off-site — on

1215- Second truck closed up, off-site — on

1400- ERRS digging out basement of foundation at the 1st pile — on

1512- Box truck for PCB capacitors on site

1400(Backnote) - 10 loads total today — on

1630- All PCB capacitors & half of the non-PCB capacitors were loaded onto the box truck by ERRS. — on

1635- START off site

10/04/2016 III

Internet/Wagner

Weather: High: 63°F, ESE 2 mph
 0600- HSS meeting & work briefing,
 Clean out drain plug to continue to load out ACM trucks — on

0620- START sets up AM equipment, 4 Dust Trays, 4 AirCon pumps, 3 personal AM pumps

0615- First truck arrives, ERRS begins to put in line — on

0620- Two other trucks arrive — on

0645- First truck leaves — on

0650- Trucks return for another load

0730(Backnote)- ERRS digging out basement

@ NW corner asbestos pile — on

0723- First Truck off-site — on

0735- Second round of trucks off-site — on

0950- ERRS begins work on drain plug will use chimney brush to pull

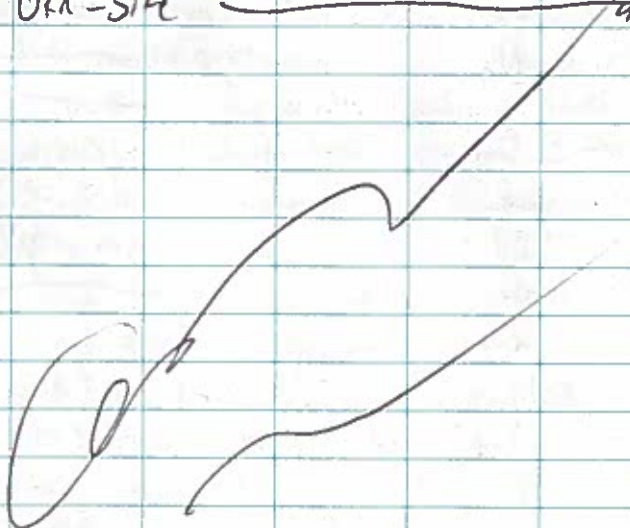
out sediment in plug — on

0955- a plug on top of Foundation in the 4" DP was found

but could not be opened — on

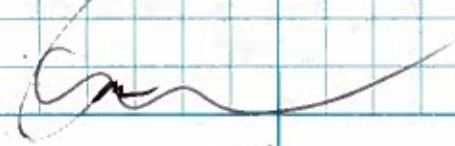
1010- a smaller diameter pipe (4") is 2' into DP, ERRS will get a 4" brush to clean DP — on

10/04/2016

- 1130- Trucks arrive to be loaded ——— a
 1201- Final truck leaves ——— a
 1215- Lunch
 1240- Return from Lunch
 1310- No more trucks for the day
 9 total loads ——— a
 1350- ERRS attempts to use 4" brush
 in drum piling, but it was still too
 big ——— a
 1430- ERRS scraps ACM Yips around
 Site ——— a
 1630- OFF-SITE ——— a
- 

10/05/16

THU

- 0600- START, EPA, ERRS on-site
 0605- Conduct HHS Meeting & Briefing
 meeting ——— a
 0630- START gave out personal AM
 to ERRS workers ——— a
 0640- START set up AM equipment
 Backsite: 0640- Trucks on-site for load out
 0645- All trucks off-site for first
 load out ——— a
 0655- ERRS continues to clean out
 Basement
 0840- Trucks return ——— a
 0920- Trucks OFF-SITE ——— a
 1130- Trucks return ——— a
 1140- Trucks OFF-SITE ——— a
 1200- Lunch
 1300- Return from lunch ——— a
 1330- ERRS gets a 2" brush to
 clean out DP ——— a
 1430- Brush is successful ——— a
 1455- START to Fed ex ——— a
- 

10/6/16 Internet/Wagner

0600- START arrives on site, has H&S meeting with
ERRS & EPA

0610- Have work briefing for the day

0645- START set-up AM equipment Dusty into

1-4 set up

0720- All AM equipment & Air Sampling equipment
set up

0800 (Bad day) - 3 trucks arrive for loading

0715 - Trucks loaded & off to landfill

0830- Sand trucks continue to arrive
to fill in basement

0910- Trucks for ACM loading arrive Back from
landfill, 3 trucks

1000- Trucks off-site to landfill

1100- Lunch

1230- Return from lunch

1350- ERRS clears further into the drain plug
got to ~20-25ft into plug & could
not go further. The plug will
be plugged & waste from plug
will be disposed of

Back into (11:00) - Trucks arrive to be loaded

Back into (12:00) - Trucks off-site

1530- START begins to collect AM equipment
& Air sampling equipment.

1400- All equipment & samples were collected
total of 9 trucks today

1430- START off-site



10/7/16 Internet/Wagner

- 0600 - ERIS holds H/S meeting, & work briefing, will load trucks & plug
The Drain plug
- 0610 - START begins to set up AM equipment, & AM equipment & Air Sampling equipment
- 0700 - Completed sampling equipment set up
- 0800 (Backnote) - 3 trucks on site to be loaded
- 0705 - All trucks loaded & off-site
- 0910 - Trucks back on-site to be loaded
- 0940 - Completed loading trucks & trucks to landfill
- 1130 - Trucks arrive back off-site to be loaded
- 1200 - Trucks loaded off-site to landfill
- 1210 - Crew off-site

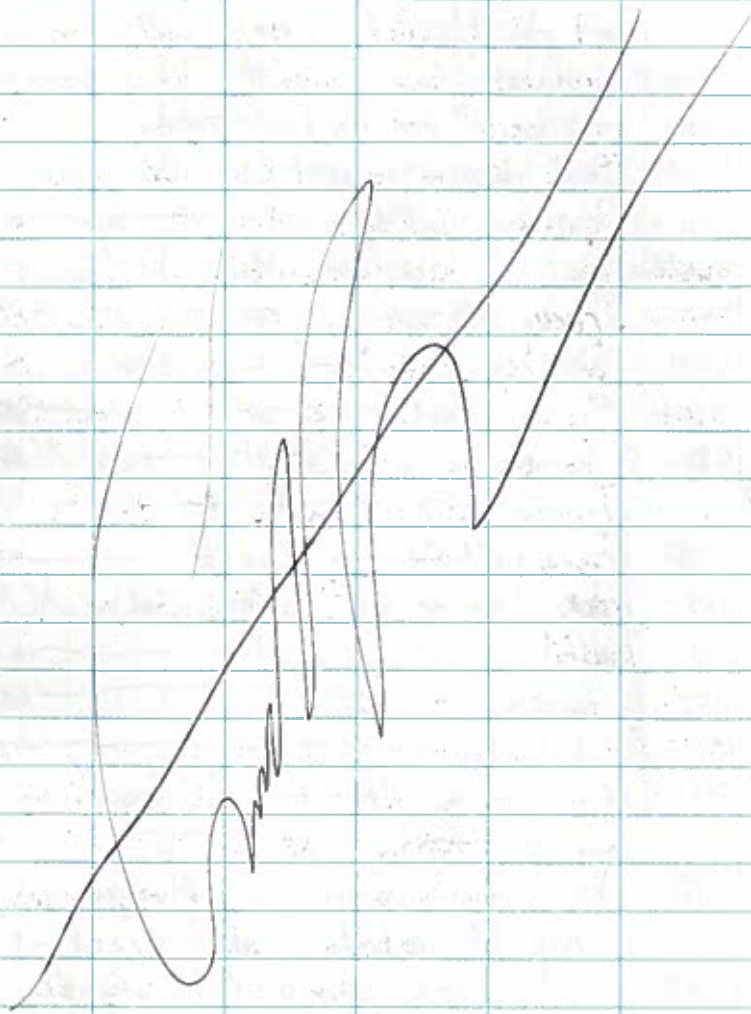
10/11/2016

THU OCT 11

Internet Wagner

- 0600 - Crew on site, ERIS conducted H/S meeting and work for the day. The Drain plug will be plugged after lunch, trucks will be loaded w/ ACM, the basement will be filled in w/ sand.
- 0615 - START begins to set up AM & AS equipment
- 0700 - Equipment set up
- 0800 (Backnote) - 5 trucks on site to be loaded
- 0640 - Trucks off-site
- 0810 - Sand truck on site to load sand into the basement
- 0900 - 5 more trucks on site to take ACM from landfill
- 0900 - Trucks off-site to landfill
- 1115 - Trucks back on site to be loaded w/ ACM
- 1211 - Trucks off-site to landfill
- 1215 - To lunch
- 1310 - Back from lunch
- 1404 - ERIS crew to Drain Plug to begin to plug
- 1510 - The drain plug was plugged w/ a mix of concrete & water cement
- 1550 - START collects AM & Air sampling equipment

1600 - ERRS begins to clean up for the day



0 10/10/16 Internet/Wagner

0600 - ERRS has H/S meeting & discussed work for the day, (continue to load out ACM piles, complete filling in basement, load green & gray product in waste building) ——— or

0604 - 3 trucks on site, ERRS will load trucks w/ ACM piles ——— or

0652 - Trucks off site to landfill w/ ACM — or

0902 - Trucks return to site from landfill to be loaded ——— or

0947 - Trucks loaded & off to landfill to dispose of ACM ——— or

1132 - Trucks return from landfill to be loaded ——— or

1210 - Trucks loaded & off site to landfill ——— or

1215 - Crew goes to lunch ——— or

1253 - Crew returns from lunch ——— or

1310 - ERRS begins removing debris from middle section of 2 concrete barriers. Debris was put on existing pile & galbestos stored so well as other ACM was seen in the debris ——— or

10/12/16

- 1400- ERIS fills 4 boxes w/ Boundary Sand
to product mix in waste building - a
- 1500- Boxes were filled & moved to
ACM pile to be loaded into the
trucks
- 1630- Work done for the day & offsite -

10/13/16

Internat/Wagner

10/13/16

37

- 0600- ERIS, START, EPA in H's meeting
and work briefing for the day - a
- 0610- 4 Trucks on site to be loaded w/
ACM material & hauled to the landfill
- 0610- Trucks off-site to landfill - a
- 0900- Trucks arrive back from landfill to
be loaded - a
- 0955- Trucks off-site to landfill - a
- 1100- Trucks back on-site to be loaded - a
- 1210- Trucks off-site - a
- 1220- Lunch - a
- 1220- Return from lunch - a
- 1400- ERIS clearing up piles & sort
around site
- 1545- START collects AM equipment
- 1630- Offsite

10/14/16

Intern

Wt 10/14/16

- 0600- ERCS Conducts A/S meeting, discuss work for the day. (load out ACM piles) & (clean up soil around waste building.)
- 0615- START begins to set up AM & AS equipment
- 0600(Backnote)- 5 trucks on-site to be loaded
- 0700- ERCS scraping debris pile near waste building & adding it to new pile near main building
- 0920- Trucks return from landfill to be reloaded
- 1108- Trucks return from landfill to be loaded
- 1221- Trucks off-site to landfill
- 1239- To lunch
- 1320- Return from lunch
- 1400- Basement 3 fully filled w/ sand
- 1430- START collects AM equipment & off-site

10/17/16 Internet/Wagner

INT III

0600- ERRS conduct the H&S meeting & discuss work for the day. Load trucks, continue clean up in waste building, cut up & dispose of poly drums, possibly clean PCB oil stains ———— CR

0605- Trucks on site, 3 trucks in cycle for the day ———— CR

0655- Trucks off-site to the landfill ———— CR

0835- Trucks arrive back on-site ———— CR

0934- Trucks off-site to the landfill ———— CR

1045- Trucks back on-site to be loaded ———— CR

1220 - Trucks off-site to landfill ———— CR

1230- Lunch ———— CR

1310- Return from lunch ———— CR

1340- ERRS to waste building to finish cleaning up foundry products left behind by Internet ———— CR

1500- ERRS completed moving materials from the waste warehouse to the load out pile ———— CR

1510- ERRS moves drums & crusher then to be loaded out ———— CR

1600- ERRS cut up poly drums for disposal ———— CR

0700- ORR-site

10/18/16 Internet/Wagner

0600- ERRS conducts H&S meeting & discusses work for the day. Continue to cut up/crush drums & put them in the load out pile, clean up PCB stain in capacitor storage area ———— CR

0615- START sets up AM & AS equipment ———— CR

0730 AM equipment set up ———— CR

0735- PCB box truck is set to arrive @ 0800 ———— CR

Backnote: 0600- Trucks arrive on site for load out ———— CR

0910- Trucks arrive back on-site ———— CR

0940- Truck off-site, 4 trucks on rotation ———— CR

1125- Trucks back on site ———— CR

1140- Lunch ———— CR

1210- Return from lunch ———— CR

Backnote: 1150- one of the trucks broke down on-site ———— CR

1205- Overpicks dropped off ———— CR

1230- Box truck for PCB capacitors arrives ———— CR

1235- Degan loading non-PCB capacitors on trucks ———— CR

1255- Completed loading non-PCB capacitors into truck ———— CR

10/18/16 Internet/Wagner

1301 - Box truck off-site

1315 - Lunch

1335 - Return from lunch (ERRS)

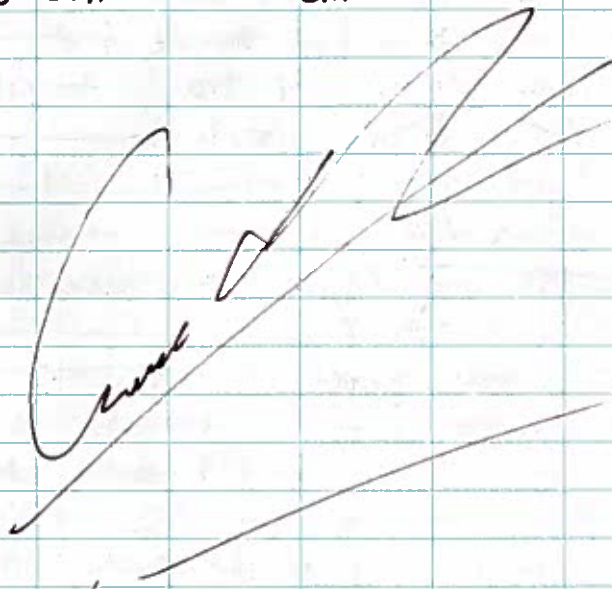
1340 - ERRS to waste building to continue cutting drums

1420 - Drums brought to load out area for disposal

1500 - 7 drums will be over packed to polymer & 1 Amine drum

1550 - START collects AM & AS equipment

1630 - START off-site



10/19/16 Internet/Wagner

UR III

0600 - ERRS conducted H&S meeting & work briefing. Drums will continue to be collected & placed @ load out piles & containers w/ solids. Trucks will be loaded out. PCB oil stains will be cleaned.

0615 - START with set up AM & AS equipment

0712 - START completed setting up equipment
Backnote: 0600 - 3 Trucks on-site to be loaded

0645 - Trucks loaded & off-site

0830 - Trucks back on site

0930 - Trucks off site (3 truck rotation today)

1115 - Trucks on site

1205 - Trucks off-site

1215 - Lunch

1255 - Return from lunch

1310 - ERRS to waste building to over-pack

1355 - ERRS over packed 6 polymer & 1 Amine drum

1415 - START marked over-pack drums w/ a sharpie to denote which each over-pack contains

1500 - ERRS continues to clean up pile

Rite in the Rain

10/19/16 Internet/Wagner

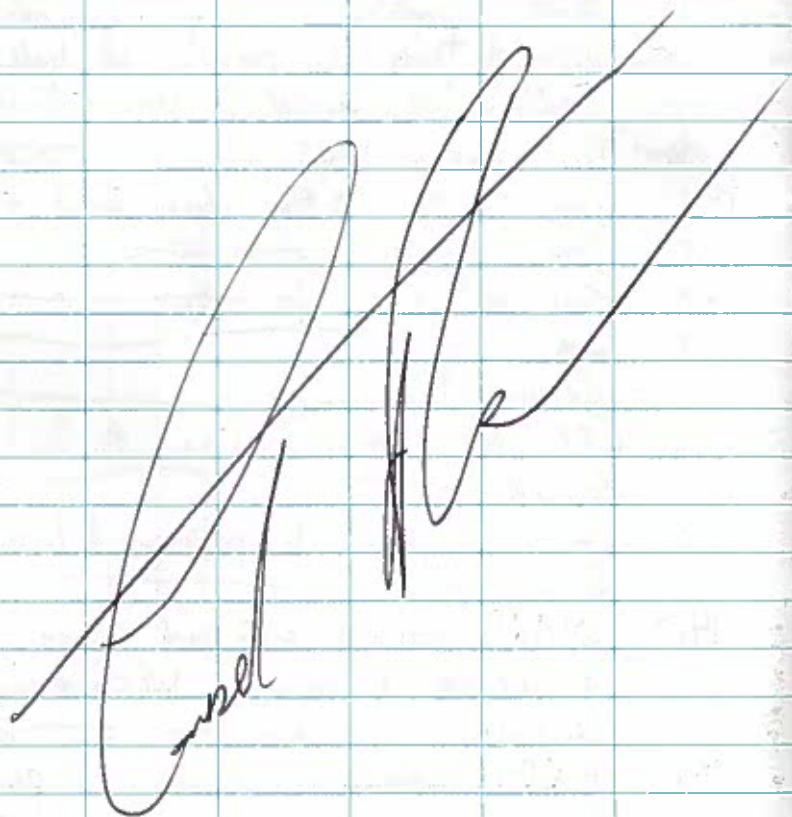
near engineering building, pile contains bags etc
and other debris

1600 STA on

Backnote: 1435- START collected AM3 AS

equipment due to rain.

1630- START off-site



10/20/16 Internet/Wagner

0600- ERKS conducts H&S meeting &
work briefing. Trucks to be loaded,
Robert to continue brush clearing,
Stain to be cleaned

0605- ERKS begins to load trucks on-site
3 trucks

Note: START will not put out AM3 AS
equipment until rain stops

0915- Trucks back on-site

0920- START puts out AM3 AS equipment

1015- Trucks off-site

1033- ERKS begins to clean PCB
stairs at capacitor storage area

1100- START to collect 2 wipe samples
from cleanup areas: IW-WO-22 &
IW-WO-23


1110- IW-WO-22 collected where PCB
capacitors were stored collect Post-
cleaning where sample IW-WO-20
was collected

1115- Samples to be collected after lunch
to let degreaser dry

1139- Trucks on-site

1210- Lunch

10/20/2016

- 1310- Return from lunch
- 1440- Collected sample IW-WO-22 a wipe
Sample where a stain was from PGB
Capacities
- 1442- Collected sample IV-WO-23 a wipe
Sample collected at another stain
- 1515- START got a flat waiting for MAB
to repair
- 1530- collected AM equipment
- 1600- Tire fixed, START offsite to
Red-ex
- 

704.1

10/21/2016

- 0600- ERRS conducted HHS meeting's
work briefing, load trucks, seal stains,
and cut fire extinguishers
- 0610- START puts out AM & AB equipment
- 0615- ERRS begins to load trucks
- 0647- Trucks off-site
- 0845- Trucks on-site to be loaded
- 0940- Trucks off-site
- 1030- Roll-off for asbestos abatement
on-site
- 1101- Roll-off dropped off near office
building
- 1130- Abatement crew begins tossing out debris
that is not ACM.
- 1140- Lunch
- 1220- Return from lunch

Project _____



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CONTENTS

[illegible]

10/24/16

Internet/Wagner

- 0600 ERRS conducts H+S meeting + work briefing. Trucks to be loaded, pump out oil from ASTs, + cut fire extinguishers
- 0630 START puts out AM+AS equipment
ERRS begins to load trucks — LM
- 0650 Trucks offsite — LM
- 0855 Trucks on site to be loaded — LM
- 0945 Trucks off-site — LM
- 1130 Trucks on-site to be loaded
- 1220 Trucks offsite — LM
- Backlog: 0800 - Asbestos abatement team on site to begin abatement of ACM containing building on NW area of site
- 1230 Lunch — LM
- 1320 Return from lunch — LM
- 1330 ERRS set up pump to begin draining AST furthest East (green AST) — LM
- 1530 ERRS begin cutting fire extinguishers, START collects AM #4 near extinguishers
- 1535 START collects AM equipment — LM
- 1630 OFFSITE

John Marshall
10-24-16

10/25/16

Internet/Wagner

- 0600 ERRS conducts H+S meeting + work briefing. Trucks to be loaded, pump out ASTs, cut extinguishers
- 0610 Trucks on site to be loaded — LM
- 0645 START puts out AM+AS equipment
- 0645 Trucks offsite — LM
- 0925 Trucks on site to be loaded — LM
- Backlog: 0800 - Asbestos abatement team on site — LM
- 0940 Roll-off for asbestos abatement on site. ^{LM} Remove roll-off box from abatement area to open area near debris pile — LM
- 1010 Trucks offsite — LM
- 1130 Trucks on site to be loaded
- 1230 Trucks offsite — LM
- 1235 Lunch — LM
- 1305 Return from lunch — LM
- 1340 ERRS begin pumping oil out of green AST w/new pump — LM
- 1515 START collects AM equipment
- 1525 ERRS cut fire extinguishers
- 1630 OFFSITE

John Marshall
10-25-16

Rite in the Rain

Internet/Wagner

10/26/16

- 0600 EARS conduct H+S meeting + work briefing: Load trucks, Sweep concrete area, drain ASTs — LM
- 0610 START puts out AM+AS equipment
- 0615 EARS load trucks w/ debris
- 0645 Trucks offsite — LM
- 0840 Trucks on site to be loaded — LM
- 0940 Trucks offsite — LM
- Backlog: 0800 - Abatement team on site
- 1130 Trucks on site to be loaded
- 1215 Trucks offsite — LM
- 1220 Lunch — LM
- 1300 Return from lunch — LM
- 1310 Begins to lightly rain. START collects Air Con sampling equipment — LM
- 1400 EARS begin draining red AST on SE side of property — LM
- 1420 Begins raining harder. START collects DustTrak monitors — LM
- 1430 EARS use bobcat to sweep concrete area + debris stockpile area — LM
- 1630 OFFSITE

Jim Wagner
10-26-16

Internet/Wagner

10-27-16

- 0600 EARS conduct H+S meeting + work briefing: Clean out fire extinguisher area, drain ASTs, tighten up site
- 0615 START puts out AM+AS equipment in new locations to triangulate Abatement work. AMs 2 & 4 in downwind locations & AM #3 upwind
- 0620 EARS use water truck & bobcat to wet & sweep warehouse with fire extinguishers — LM
- 0630 EARS drain red AST — LM
- 0800 Asbestos Abatement crew on site
- 0930 START GPS new Air monitoring locations
- 1200 Lunch — LM
- 1245 Return from lunch — LM
- 1320 EARS begin draining white ASTs in NW location on site — LM
- 1400 EARS continue to sweep/bottom of concrete area where debris was stockpiled
- 1530 START collects AM equipment
- 1630 OFFSITE

Jim Wagner
10-27-16

Internet/Wagner

10/28/16

- 0600 EARS conduct H&S meeting + work
brexting —————> LH
- 0610 START packs up AM & AS equipment
for offsite removal —————> LH
- 0705 START offsite —————>

Jim Wall
10-28-16

SINCE 1818

— SINCE 1916 —
Rite in the Rain®

== DEFYING MOTHER NATURE ==

Name

Internet/Wagner

Address

Phone

Project



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CONTENTS

[illegible]

9/6/16

- 11:00 START onSite. Andre will be doing asbestos sampling and inspection of the property.
- 11:30 Quick walk-through of site before sampling starting on East side.
- 11:40 IW-BA-01 and IW-BA-02
 9x9 green tile black 9x9 tile
 Paper-bags
 Located Throughout.
- 11:52 East pile closest to the building with wall partially undamaged green 9x9 has been seen throughout Along with white tile black mosaic and white with streaks with black mosaic both 12x12
 IW-BA-03 (Streaked tile)
 IW-BA-04 (white tile)
- 12:00 inspecting brick pile closest to the building Roofing paper scattered Throughout site. IW-BA-05
- 12:12 inspection of smaller brick pile next to the building. NO NEW Suspect ACM noted. green 9x9 tile and Roofing Seen.

9/6/16

- 1234 farthest pile away from building HAS Rolled up flooring IW-BA-06 and unknown fiber throughout pile IW-BA-07
- 1249 inspection at last pile on the west side towards holding tank NO NEW suspect material noticed
- 1300 pile inspection complete due to the debris piles hushfulness ACM could be hidden and missed by inspection.
- 1313 moving to office building.
- 1315 Top floor IW-BA-08 red and brown ~~stone~~ 9x9 IW-BA-09 Black 12x12
- 1326 Drywall from ceiling IW-BA-10
- 1330 Dry wall / Sheet rock from walls IW-BA-11
- 1333 Glue picks from ceiling tile IW-BA-12
- 1342 IW-BA-13 Pile in Sulfur First floor
- 1350 Composite

MONDAY
9-26-16

0700 - START (SCHULTZ), EPA (TRICIA EDWARDS),
& ERS PERSONNEL ON SITE.

ERS WILL PREP DECON & TRUCK
LOAD OUT ZONE TODAY. ERS IS
WORKING ON ACQUIRING SCAFFOLDING.
START WILL SET UP FOUR PERIMETER
AIR MONITORING STATIONS TO
COLLECT REAL TIME PARTICULATE
DATA W/ DUST TRAKS. ——— KS

0705 - DAILY SAFETY TAILGATE. ——— KS

0730 - SET UP DUSTTRAKS & VIPER. ——— KS

0830 - DEPLOY DUSTTRAKS 1, 2, & 3. ——— KS

WORKING ON DUSTTRAK 4. MODEM 4A
IS NOT SENDING DATA OUT & MODEM
4B IS NOT RECEIVING DATA IN. CHECKED
ALL CONNECTIONS & SWITCHED ANTENNAS.

0930 to 1200 - WORK W/ BRIAN COOPER OF
EPA TO GET VIPER RUNNING CORRECTLY.

1230 - BEGIN RUN 'INTERMET/WAGNER 092616
RUN 4'. ——— KS

1300 - SITE WALK, CHANGE OUT BATTERIES
FOR MODEMS ON DUST TRAKS. ——— KS

1400 - ERS PERSONNEL COMPLETE SETTING
UP DECON AREA NEXT TO OLD
OFFICE & LAB. ——— KS

MONDAY
9-26-16

1500 - ERS MOVING DEBRIS PILES

1700 - START BEGINS PICKING UP
PERIMETER AIR MONITORING
EQUIPMENT. ——— KS

1730 - START, EPA, & ERS LEAVE
SITE. ——— KS

9-26-16
Schultz

TUESDAY
9-27-16

0700 - START (SCHULTZ), EPA (EDWARDS), & ERRS PERSONNEL ON SITE. SITE ACTIVITIES TODAY: SCISSOR LIFT DELIVERY, CONTINUE CONSOLIDATING DEBRIS, CONTINUE CLEANING OUT BUILDINGS. LEVEL C PPE WHEN HANDLING DEBRIS. START WILL SET UP PAM.

WEATHER - TEMP: 56°F, WIND 11.5 MPH, PARTLY CLOUDY, 0% CHANCE OF PRECIPITATION

0715 - DEPLOY PERIMETER AIR MONITORING EQUIPMENT - DUST TRACKS SET UP AT FOUR LOCATIONS. ———— KS

UNIT	LOCATION	MAX CONCENTRATION
DUST TRAK 1	DOWNWIND-TRAILERS	
DUST TRAK 2	BY TURNSTILES	
DUST TRAK 3	OLD FOUNDATIONS/DRAIN PLUG	
DUST TRAK 4	ACM DEBRIS PILES	

0735 - BEGIN RUN 'INTERNET/WAGNER 092716 RUN1'

0800 - ERRS CONSOLIDATING DEBRIS ———— KS

0840 - SCISSOR LIFTS ARRIVE ON SITE. ———— KS

0930 - ERRS CONSOLIDATING DEBRIS. ———— KS

1027 - HAD TO RESTART VIPER. BEGIN RUN 'INTERNET/WAGNER 092716 RUN2'

1055 - RESTARTED VIPER AGAIN. BEGIN RUN

'INTERNET/WAGNER 092716 RUN3'. ———— KS

TUESDAY
9-27-16

1200 - ERRS BREAKS FOR LUNCH.

1215 - START SWITCHES OUT BATTERIES AT ALL FOUR DUST TRAK UNITS. ———— KS

1300 - ERRS CONTINUES CONSOLIDATING ACM DEBRIS, PREPARING FOR LOAD OUT TOMORROW.

1400 - SITE WALK, CHECK DUST TRACKS. ———— KS

1500 - ERRS CONTINUES CONSOLIDATING ACM DEBRIS ———— KS

1645 - START BEGINS BRINGING IN PERIMETER AIR MONITORING EQUIPMENT. ———— KS

1700 - START (SCHULTZ) LEAVES SITE.

9-27-16
Karl Schultz

WEDNESDAY
9-28-16

0700 - START (SCHULTZ), EPA (EDWARDS),
ERRS PERSONNEL ON SITE. —

SITE ACTIVITIES:

- ACM LOAD OUT
- PERIMETER AIR MONITORING
- AIR SAMPLING - CO-LOCATED W/
PERIMETER AIR MONITORING

DAILY SAFETY TAILGATE - FALL

PROTECTION ON LIFTS. — KS

WEATHER - 59°F, WIND NNW @ 15MPH, MOSTLY
CLOUDY,

0710 - CALIBRATE AIRCON 2 HIGH VOLUME
AIR SAMPLING PUMPS. CALIBRATING
TO 10.0 L/MIN.

UNIT	BEGIN FLOW	END FLOW	START TIME	END TIME	TOTAL VOLUME
AIRCON 001	10.03 $\frac{L}{min}$	9.84	0733	1700	4888.02 L
AIRCON 002	9.99 $\frac{L}{min}$	9.78	0750	1625	3571.13 L
AIRCON 003	10.01 $\frac{L}{min}$	9.83	0754	1649	4434.24 L
AIRCON 004	10.06 $\frac{L}{min}$	9.76	0801	1656	4439.68 L

0730 - BEGIN DEPLOYING PERIMETER AIR
MONITORING EQUIPMENT — KS

ERRS BEGINS ACM LOAD OUT.

0811 - BEGIN RUN 'INTERMET/WAGNER 092816 RUN1'.

0910 - AIRCON 002 DEAD, LOW BATTERY FAULT.

WILL CHECK BATTERY CONNECTIONS. —

1000 - BEGIN PULLING ONE BATTERY FROM EACH
AIRCON TO CHARGE. — KS

1100 - ASBESTOS ABATEMENT CONTRACTOR ON
SITE TO INSPECT OLD OFFICE
BUILDING. (THORN BURG ABATEMENT) — KS

1205 - ASBESTOS LOAD OUT TRUCKS BACK
FOR SECOND ROUND OF LOAD OUT

1210 - SECOND ASBESTOS ABATEMENT (KAM
SERVICES, INC) CONTRACTOR ON SITE TO INSPECT
OLD OFFICE BUILDING. — KS

1300 - SWITCH OUT MODEM BATTERIES
ON DUST TRAKS 001, 002, 003, & 004

1400 - ERRS CONSOLIDATING ACM.

1535 - VIPER COMPUTER SHUT OFF FOR
UNKNOWN REASON. POWERED BACK
ON, STARTED NEW VIPER RUN,
NO MODEMS WOULD CONNECT.

1645 - START BEGINS BRINGING IN PERIMETER
AIR MONITORING EQUIPMENT — KS

1700 - DUE TO LOW BATTERY FAULTS, TOTAL
VOLUME ADJUSTED & CALCULATED TO
ACCOUNT FOR DOWN TIME FOR AIR SAMPLERS
COLLECTED. — \$5

1740 - LEAVE SITE. — KS

THURSDAY
9-29-16

0700 - START (SCHULTZ), EPA (EDWARDS), & ERPS
PERSONNEL ON SITE. SITE ACTIVITIES

TODAY: _____ KS

ERPS - ACM LOAD OUT - 5 TRUCKS TOTAL

START - PERIMETER AIR MONITORING &
SAMPLING (ONLY AT LOCATION 004
DUE TO RAIN). _____ KS

ERPS - DEBRIS CONSOLIDATION _____ KS

0705 - DAILY SAFETY TAILGATE, SLIPS, TRIPS,
& FALLS DUE TO SLICK CONDITIONS.

WEATHER - 59°F, NNW WIND AT 17 MPH, OVERCAST,
RAIN ON & OFF TODAY. _____ KS

0710 - CALIBRATE AIRCONZ PUMP 004.

UNIT	BEGIN FLOW	END FLOW	START TIME	END TIME	TOTAL VOLUME
AIRCON 004	10.05 $\frac{1}{4}$ min	10.19 $\frac{1}{4}$ min	0726	1606	

0720 - BEGIN DEPLOYING PERIMETER AIR
MONITORING EQUIPMENT. DUST TRAK
& AIRCON2 SET UP AT 004, ONLY
DUST TRAK SET UP AT 001. _____ KS

0730 - FIRST TRUCK BEING LOADED OUT W/
ACM. 5 TRUCKS IN ROTATION TODAY.

TRUCKING COMPANIES ARE:

BEELMAN _____ KS

PBI _____ KS

THURSDAY
9-29-16

0900 - ERPS CONTINUING DEBRIS CONSOLIDATION
& ^{ACM} LOAD OUT. _____ KS

1000 - RAINING SUBSTANTIALLY, BRING IN
DUST TRAK AT 001. _____ KS

1200 - LUNCH _____ KS

1230 - DAYTON FREIGHT DELIVERS PPE ORDER
TO ERPS. _____ KS

1306 - AIRCONZ 004 HAS LOW BATTERY FAULT.

1316 - ~~BEGIN~~ CONTINUE AIR SAMPLE AT
004 AFTER REPLACING BATTERY.

1400 - TWO ROUNDS OF TRUCKS LOADED
OUT TODAY - 10 TOTAL. THREE
ADDITIONAL TRUCKS LOADED &
READY TO DUMP AT THE LANDFILL
FIRST THING TOMORROW. _____ KS

1500 - ERPS CONTINUES CONSOLIDATING
DEBRIS TO BE LOADED OUT. _____ KS

1606 - LOW BATTERY FAULT ON AIRCON 004.

TOTAL VOLUME WILL BE CALCULATE
AND ~~DOWN~~ ^{FACTOR IN} DOWN TIME. RAIN
CONTINUES. CONSOLIDATION OF ACM
CONTINUES. _____ KS

1700 - START (SCHULTZ) LEAVES SITE.

9-29-16

Kel Schultz
Rite in the Rain.

FRIDAY
9-30-16

0600 - START (SCHULTZ), EPA (EDWARDS), & ERRS PERSONNEL ON SITE. SITE ACTIVITIES:

- ACM CONSOLIDATION & LOAD OUT
- PERIMETER AIR MONITORING & SAMPLING IF WEATHER PERMITS

WEATHER - 61°F, WIND 10.4 MPH N, OVERCAST & RAINING. — KS

0610 - CALIBRATE AIRCON 2 CO4. WILL ONLY BE PUTTING CO4 OUT TODAY DUE TO RAIN.

0630 - DEPLOY AIRCON 2 CO4 & DUST TRAP CO4.

UNIT	BEGIN FLOW	END FLOW	BEGIN TIME	END TIME	TOTAL VOLUME
CO4	10.19 ⁴ / _{min}	10.12 ⁴ / _{min}	0630	1520	

0635 - FIRST TRUCK LOADED OUT W/ ACM.

0650 - ERRS EXCAVATED OUT A BASEMENT UNDER A DEBRIS PILE, ESTIMATED VOLUME OF BASEMENT IS 32'x32'x7'.

0700 - 5 TRUCKS TODAY. — KS

0800 - ERRS PERSONNEL CONSOLIDATING ACM IN BETWEEN TRUCK LOAD OUT. — KS

0900 - SITE WALK, ACTIVITIES CONTINUE. PERIMETER AIR MONITORING AT CO4, CONSOLIDATION OF ACM.

0930 - SECOND ROUND OF TRUCKS ARRIVE.

1000 - SITE WALK, CHECK ON PERIMETER AIR MONITORING EQUIPMENT. ALL GOOD. — KS

FRIDAY
9-30-16 13

1120 - PROPERTY OWNER ARRIVES AT SITE, EPA (EDWARDS) DISCUSSED PROGRESS WITH THEM. — KS

1200 - LUNCH. — KS

1230 - END LUNCH. — KS

1300 - NINE TRUCKS TOTAL TODAY.

COLLECTED IN-BASIS OF TODAY CONSOLIDATING ACM & CLEANING UP SITE TO PREPARE FOR SHUT-DOWN OVER THE WEEKEND. — KS

1335 - PORT-A-POTM CREW ON SITE TO CLEAN OUT FACILITIES. — KS

BACKNOTE: 1300 - EPA (EDWARDS) LEAVES SITE. — KS

1400 - ERRS (BOWMAN) LEAVES SITE. — KS

1500 - ERRS PERSONNEL CONTINUES CONSOLIDATING ACM DEBRIS. — KS

1530 - START BEGINS BRINGING IN AIR MONITORING EQUIPMENT. — KS

1600 - START (SCHULTZ) LEAVES SITE.

9-30-16



10/03/2016

0930 - Air Con Cal

#	Start Flow	End Flow	Start time	End time
1	9.814	9.728	0932	1359
2	10.780	10.427	0942	1403
3	9.824	9.380	0945	1346
4	9.896	9.234	0954	1357

1000 - All Dust Traps & Air Con pump deployed

1340 - START collected AM equipment



10/04/2016

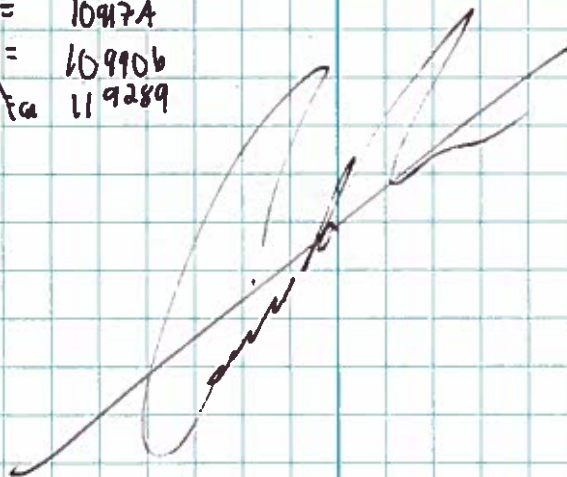
0600 - START to collect personal AM for FERS, START sols w/ Dust Traps, Air con

Pump	SF	EF	ST	ET	Sample
P1	2.10	2.05	0625	1619	IW-DF-P1-100416
P2	2.06	2.03	0627	1622	IW-SB-P2-100416
P3	2.01	2.03	0628	1622	IW-BP-P3-100416
1	9.928	9.844	0636	1610	IW-AS-001-100416
2	10.560	10.430	0635	1555	IW-AS-002-100416
3	9.729	9.827	0640	1557	IW-AS-003-100416
4	9.888	9.886	0645	1603	IW-AS-004-100416

P1 = 109174

P2 = 109906

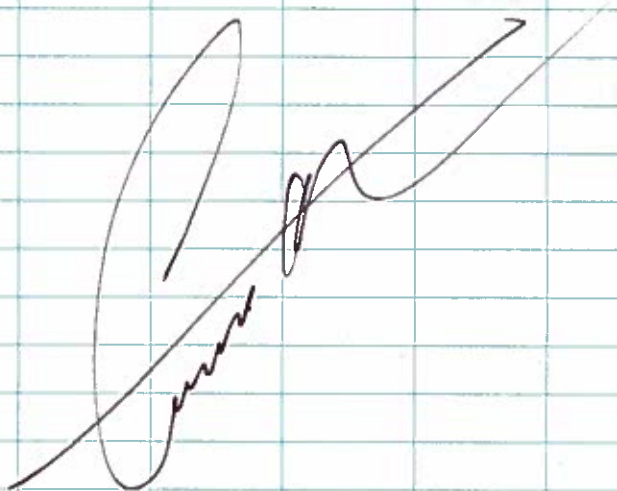
P3 = 119289



10/05/16

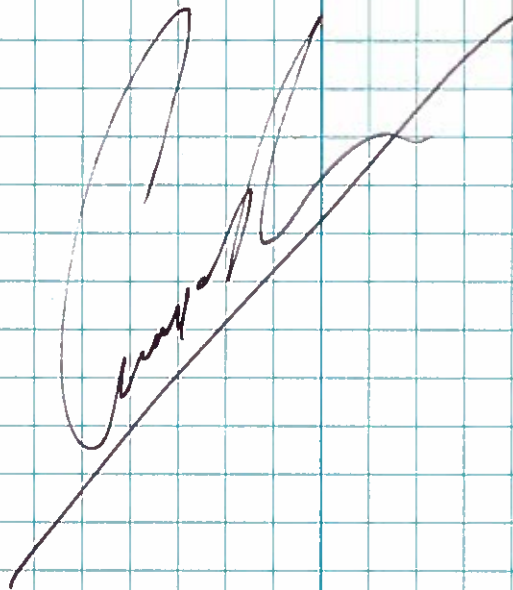
Pump	ST	EF	EF	EF	Sample
P1	0610	2.05	1410	2.04	
P2	0610	2.06	1410	2.06	
P3	0610	2.04	1410	2.03	
1	0630	9.876	1410	9.854	
2	0632	10.410	1405	10.250	
3	0636	9.826	1407	9.925	
4	0640	9.875	1410	9.855	

0600- START begins set up of AM equipment
 1400- START collects AM Equipment



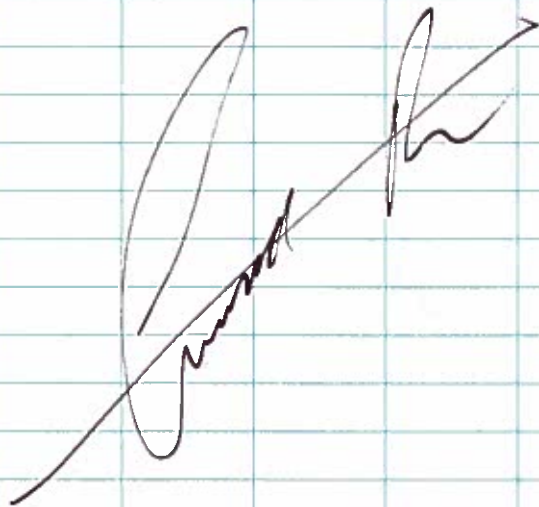
10/06/16

Pump	ST	ET	SF	EF	Sample
P1	0630	1430	2.05	2.04	IW-DI-P1-100616
P2	0630	1430	2.04	2.04	IW-SB-P2-100616
P3	0630	1430	2.03	2.02	IW-BP-P3-100616
1	0632	1600	9.895	9.866	IW-AS-001-100616
2	0638	1605	10.214	10.222	IW-AS-002-100616
3	0640	1602	9.726	9.874	IW-AS-003-100616
4	0642	1603	9.997	9.882	IW-AS-004-100616



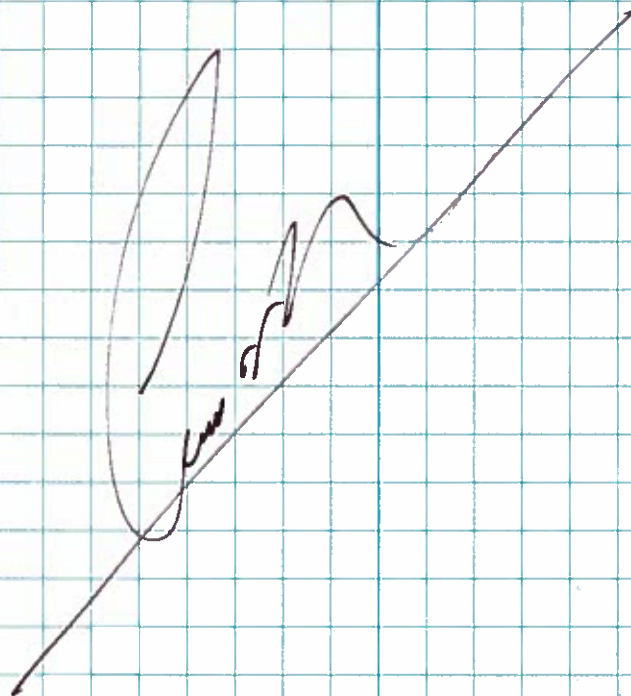
10/11/16 Internet Wagner

0610- START to set up AM equipment 4 duotrate					
Pump	ST	ET	SF	EF	Sample
1	0645	1515	9.772	9.764	IW-AS-001
2	0650	1530	10.350	10.210	IW-AS-002
3	0632	1534	9.869	9.872	IW-AS-003
4	0654	1556	9.997	9.896	IW-AS-004



10/12/16 Internet/Wagner

0605- START to set up AM 3 AS equipment					
Pump	ST	ET	SF	EF	Sample
1	0616	1615	9.765	9.678	IW-AS-001-101216
2	0636	1610	10.160	10.206	IW-AS-002-101216
3	0634	1606	9.990	9.996	IW-AS-003-101216
4	0637	1604	9.870	9.865	IW-AS-004-101216



10/13/16

Intormet/Wagner

Pump	ST	ET	SE	EF	Sample
1	0605	140	9.786	9.724	AS-001
2	0630	1420	10.166	9.999	AS-002
3	0632	1422	9.775	9.710	AS-003
4	0634	1426	9.764	9.895	AS-004

10/14/16

Pump	ST	SF	ET	EF	Sample
1	0615	9.860	140	9.800	AS-001
2	0621	9.920	1410	9.975	AS-002
3	0625	9.855	1412	9.872	AS-003
4	0627	9.540	1415	9.854	AS-004

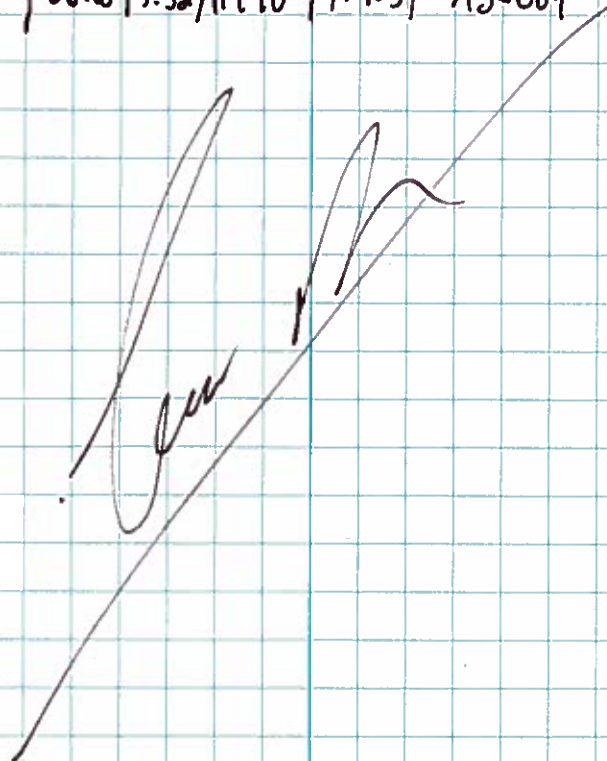
10/17/16

Pump	ST	SF	ET	EF	Sample
1	0616	9.678	1500	9.772	AS-001
2	0630	9.999	1526	10.102	AS-002
3	0632	9.746	1524	9.854	AS-003
4	0634	9.425	1526	9.568	AS-004

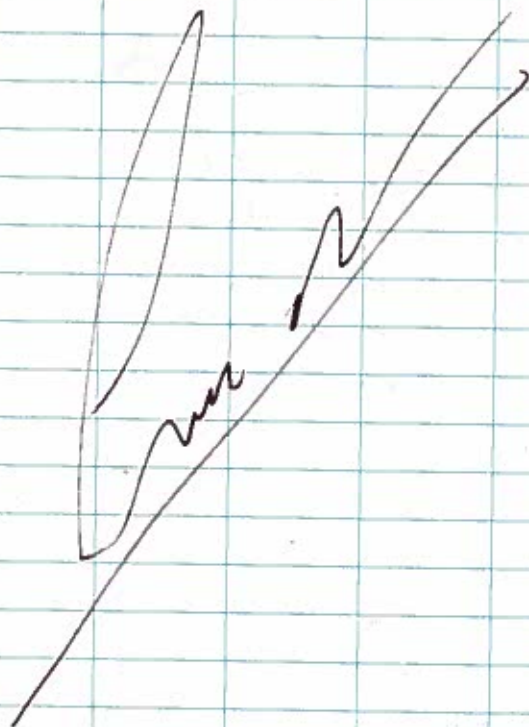


10/18/16

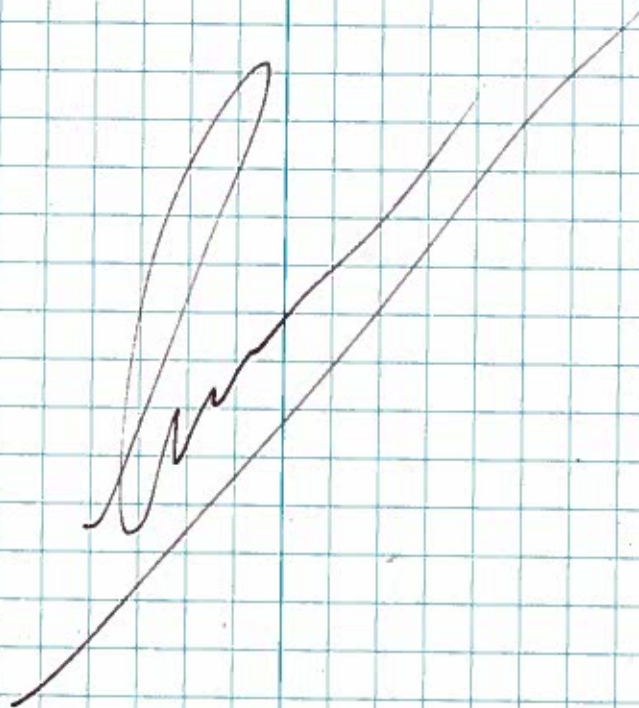
Pump	ST	SF	ET	EF	Sample
1	0605	9.778	1436	9.682	AS-001
2	0615	9.759	1436	9.725	AS-002
3	0618	9.627	1434	9.904	AS-003
4	0620	9.524	1440	9.423	AS-004



10/19/2016 Internet/Wagner				
Pump	ST	ET	SF	EF
1	0605	1407	9.797	9.797
2	0612	1416	9.625	9.597
3	0614	1444	9.700	9.749
4	0618	1420	9.960	9.846



10/20/16 Internet/Wagner				
Pump	ST	ET	SF	EF
1	0930	1516	9.978	9.990
2	0932	1515	9.724	9.725
3	0936	1517	9.849	9.889
4	0938	1520	9.552	9.916



10/21/2016

Pump	ST	ET	SF	EF
1	0605	1804	9.429	9.527
2	0607	1415	9.629	9.729
3	0615	1417	9.606	9.549
4	0619	1420	9.984	9.887

10/24/2016

Pump	ST	ET	SF	EF
1	0605	1500	9.114	9.114
2	0715	1530	15.62	15.62
3	0725	1534	18.0	9.486
4	0720	1539	14.33	14.33

1330 ERRS begins draining AST #2

1405 Screen in pump clogged, cleaned inside of pump + screen.

1415 Filled 2 55 gallon drums from AST #3

1443 Filled 3rd 55 gallon drum from AST #3

1430 OFFSITE

10-24-16

10/25/16

Pump	ST	ET	SR	EF
1	0622	1338	10.02	10.36
2	0646	1245	9.905	10.05
3	0651	1444	9.00	9.782
4	0656	1419	10.00	10.08

10-25-16

10-26-16

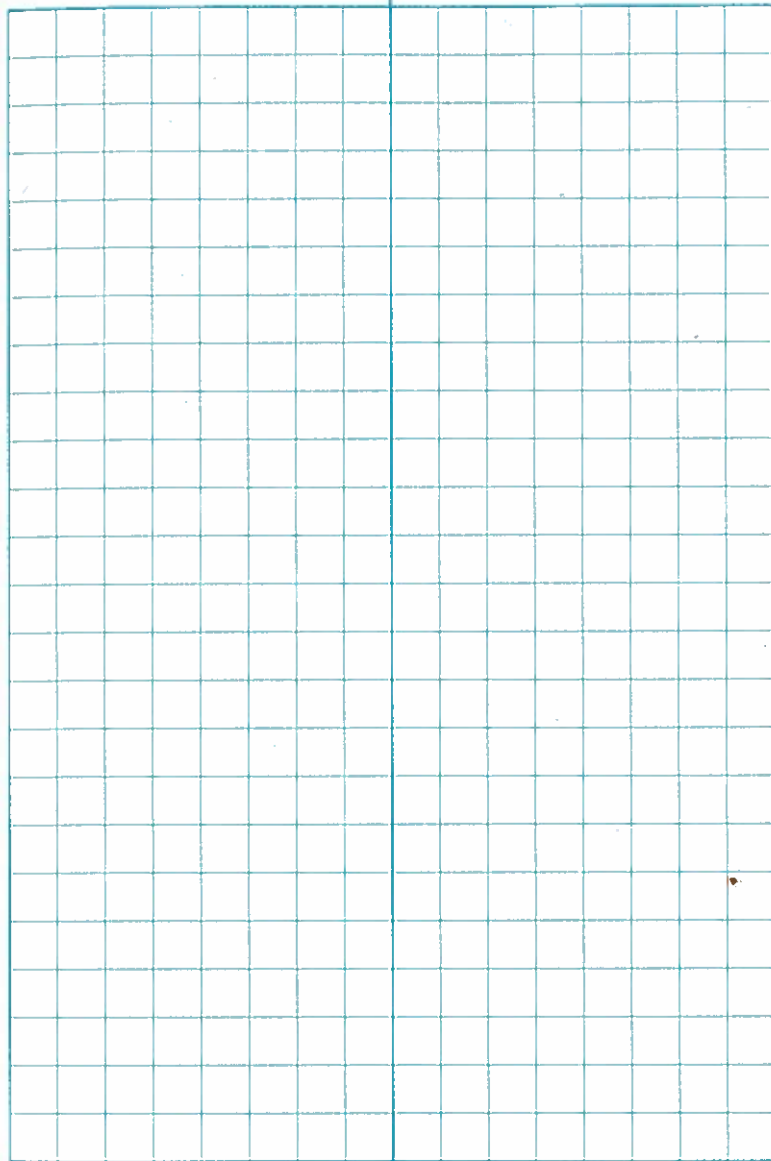
Pump	ST	ET	SR	EF
1	0625	1308	10.09	10.34
2	0636	1120	9.967	11.62
3	0640	1320	9.618	9.282
4	0645	1432	9.781	7.191

- 0900 Property owners visit site - open
Steel plate to concrete pit in foundry
area near Air monitor 4. Request Report Final
- 1310 Began to rain - START collects Aircons
- 1420 Begins to rain harder - START collects
all air monitoring equipment
- 1630 OFFSITE

10-26-16

10-27-10

Pump	ST	ET	SF	EF
1	0621	12.54	10.09	10.14
2	0633	10.55	11.62	14.43
3	0637	14.39	8.282	7.734
4	0643	13.56	7.191	12.72



APPENDIX E
COC RECORDS

Report To:
EMAIL:CORDELL.RENNER@TETRA TECH.COM
Company:TETRA TECH
Address:1 S. WACKER DRIVE SUITE 5700
CHICAGO, IL 60606
Invoice To:
EMAIL:CHRIS.BURNS@TETRA TECH.COM
Company:SAME AS ABOVE
Address:

***Party listed is responsible for payment of invoice as per CT Laboratories' terms and conditions**

[illegible]

9-10-16 TSC
BA

Company: TETRA TECHProject Contact: CORDELL REMMERTelephone: 847-913-2904Project Name: INTERMET/WAGNERProject #: 123X9026 0015051600403Location: Decatur, ILSampled By: CR, LM

CT LABORATORIES

Folder #: 121963Company: TETRA TECHProject: INTERMET/WAGNER CLogged By: JLS PM BM

1230 Lange Court, Baraboo, WI 53913

608-356-2760 Fax 608-356-2766

www.ctlaboratories.com

am:

RCRA SDWA NPDES

Waste Other _____

Report To:

EMAIL: Cordell.Remmer@tetratech.comCompany: Tetra TechAddress: 4 S. Wacker Dr.
Chicago, IL 60606

Invoice To:*

EMAIL: Cordell.Remmer@tetratech.comCompany: Tetra TechAddress: 4 S. Wacker Dr.
Chicago, IL 60606

*Party listed is responsible for payment of invoice as per CT Laboratories' terms and conditions

Client Special Instructions

ANALYSES REQUESTED

Turnaround Time

Normal RUSH*

Date Needed: _____

Rush analysis requires prior
CT Laboratories' approval

Surcharges:

24 hr 200%

2-3 days 100%

4-9 days 50%

Matrix:

GW - groundwater SW - surface water WW - wastewater DW - drinking water

S - soil/sediment SL - sludge A - air M - misc/waste

Filtered? Y/N

TCLP Metals

TCLP VOCs

TCLP SVOCs

Reactivity

Corrosivity

Ignitability

PCBs

Total # Containers

Designated MS/MSD

Collection		Matrix	Grab/ Comp	Sample #	Sample ID Description		Fill in Spaces with Bottles per Test																CT Lab ID # Lab use only	
Date	Time																							
9.8.16	1040	M	G		IW-DR-02	N	x	x	x	x	x	x	x										768946/947	
9.8.16	1050	M	G		IW-DR-06	↓	x	x	x	x	x	x	x										768948/949	
9.8.16	1100	M	G		IW-DR-09	↓	x	x	x	x	x	x	x										768950/956	
9.8.16	1120	M	G		IW-SO-02	↓	x	x	x	x	x	x	x										768954/965	
9.8.16	1400	M	G		IW-AST-01	↓	x	x	x	x	x	x	x										768966/967	
9.8.16	1410	M	G		IW-AST-02	↓	x	x	x	x	x	x	x										768968/969	
9.8.16	1420	M	G		IW-AST-03	↓	x	x	x	x	x	x	x										768970/971	
				</																				

Relinquished By:

Date/Time

9-8-16/1600

Received By:

Date/Time

Lab Use Only

Ice Present Yes ☒ No ☐Temp 15.9 IR Gun 1.6Cooler # 5366

Received by:

Date/Time

Received for Laboratory by:

Date/Time

9/12/16 1352

CT LABORATORIES

Folder # 122747

Company TETRA TECH

Project INTERMET WAGNER CO

Logged By JLS PM BMI

gram:
☒ RCRA ☐ SDWA ☐ NPDES
☐ d Waste ☐ Other _____
 # _____

Report To:
EMAIL: Cordell.Lerner@tetratech.com
Company: Team Tech
Address:
1 S. Wacker Dr Chicago, IL
Invoice To:*
EMAIL: Saml
Company:
Address:

***Party listed is responsible for payment of invoice as per CT Laboratories' terms and conditions**

Level 4 QC
5-day TAT

Filtered? Y/N

Total VOC	
Total SVOC	
TAH Metals	

Total # Containers

Designated MS/MSD

Date Needed: 10/19/16

**Rush analysis requires prior
CT Laboratories' approval**

Surcharges:

24 hr 200%
2-3 days 100%
4-9 days 50%

Fill in Spaces with Bottles per Test

CT Lab ID # _____
Lab use only

10/7/16	1100	5	6	ILW-55-17-100716
---------	------	---	---	------------------

X	X	X
---	---	---

2

785-311

Relinquished By:

Date/Time

Received By:

Date/Time

Lab Use Only

Ice Present ☒ Yes ☐ No

Received by:

Date/Time

Received for Laboratory by:

Date/Time

Temperature 9.8
Cooler # unmarked

Cooler # Unmarked

Company: **TETRA TECH**Project Contact: **CORDELL RENNER**Telephone: **847.913.2904**Project Name: **INTERMET/WAGNER**Project #: **03X90260001S051606403**Location: **DECATUR, IL**Sampled By: **CR, LM, KS****CT LABORATORIES**

1230 Lange Court, Baraboo, WI 53913

608-356-2760 Fax 608-356-2766

www.ctlaboratories.com

Lab Use Only
Place Header Sticker Here:

121894

Program:

QSM RCRA SDWA NPDES

Solid Waste Other _____

PO #

Report To:

EMAIL: **CORDELL.RENNER@TETRATECH.COM**Company: **TETRA TECH**Address: **1 S. WACKER DRIVE SUITE 5700
CHICAGO, IL 60606**

Invoice To: *

EMAIL: **CHRIS.BURNS@TETRATECH.COM**Company: **SAME AS ABOVE**

Address:

*Party listed is responsible for payment of invoice as per CT Laboratories' terms and conditions

Client Special Instructions

ANALYSES REQUESTED

Turnaround Time

Normal RUSH*

Date Needed: _____

Rush analysis requires prior
CT Laboratories' approval

Surcharges:

24 hr 200%

2-3 days 100%

4-9 days 50%

Matrix:

GW - groundwater SW - surface water WW - wastewater DW - drinking water

S - soil/sediment SL - sludge A - air M - misc/waste

Filtered? Y/N

TCLP METALS

TCLP SVOCs

TCLP VOCs

PEST/HERB

PCB

Total # Containers

Designated MS/MSD

Collection		Matrix	Grab/Comp	Sample #	Sample ID Description	Fill in Spaces with Bottles per Test																CT Lab ID #	
Date	Time																					Lab use only	
9.7.16	1400	S	GRAB		IW-FS-01 DUPE	X															2	7675761577	
	1405				IN-FS-02	X															1	767578	
	1410				IW-FS-03	X															1	767579	
	1415				IW-SO-01	X															1	767580	
	1430				IN-SS-12 DUPE ms/msd	X	X	X	X	X											3	X	767581/582/583/584/585/586/587/588/589/590/591/592/593/594/595/596/597/598/599/600
	1435				IW-SS-13	X	X	X	X	X											1	767608/609	767610/611
	1440				IW-SS-14	X	X	X	X	X											1		
	1445				IW-SS-15																		
	1450				IW-SS-16																		

Relinquished By:

Date/Time

9.7.16/1700

Received By:

Date/Time

Lab Use Only

Ice Present ☒ Yes ☐ NoTemp 19.2.6 IR Gun 14Cooler # 3221, 5656

Received by:

Date/Time

Received for Laboratory by:

Date/Time

9/8/16 1613

9/8/16 1325 jls

Company: **TETRA TECH**Project Contact: **CORDELL RENNER**Telephone: **847.913.2904**Project Name: **INTERMET/WAGNER**Project #: **/03X90260001S051606403**Location: **DECATUR, IL**Sampled By: **CR, LM, KS****CT LABORATORIES**1230 Lange Court, Baraboo, WI 53913
608-356-2760 Fax 608-356-2766
www.ctlaboratories.comLab Use Only
Place Header Sticker Here:

121894

Program:

QSM RCRA SDWA NPDES

Solid Waste Other _____

PO #

Report To:

EMAIL: **CORDELL.RENNER@TETRATECH.COM**Company: **TETRA TECH**Address: **1 S. WACKER DRIVE SUITE 5700
CHICAGO, IL 60606**

Invoice To: *

EMAIL: **CHRIS.BURNS@TETRATECH.COM**Company: **SAME AS ABOVE**

Address:

*Party listed is responsible for payment of invoice as per CT Laboratories' terms and conditions

Client Special Instructions

ANALYSES REQUESTED

Turnaround Time

Normal RUSH*

Date Needed: _____

Rush analysis requires prior
CT Laboratories' approval

Surcharges:

24 hr 200%

2-3 days 100%

4-9 days 50%

Matrix:

GW - groundwater SW - surface water WW - wastewater DW - drinking water
S - soil/sediment SL - sludge A - air M - misc/waste

Filtered? Y/N

EPA 8082A

Total # Containers

Designated MS/MSD

Collection		Matrix	Grab/ Comp	Sample #	Sample ID Description	Fill in Spaces with Bottles per Test																CT Lab ID # Lab use only	
Date	Time																						
9.7.16	1230	S	GRAB		IW-SS-01	X												1		767563			
	1235				IW-SS-02	X												1		" 564			
	1240				IW-SS-03	X												1		565			
	1245				IW-SS-04	X												1		566			
	1250				IW-SS-05	X												1		567			
	1255				IW-SS-06	X												1		568			
	1300				IW-SS-07	X												1		569			
	1305				IW-SS-08	X												1		570			
	1310				IW-SS-09	X												1		571			
	1315				IW-SS-10 & DUP	X												1		572/573			
✓	1320	✓	✓		IW-SS-11 & DUP & MS/MSD	X												1	X	574/575			

Relinquished By:

K. Q. Schult

Date/Time

9.7.16 1700

Received By:

Date/Time

Received by:

Date/Time

Received for Laboratory by:

Date/Time

121894 - Page 94 of 99

JL

9/8/16 1613

Lab Use Only

Ice Present ☒ Yes ☐ NoTemp 19.2.6 IR Gun 14Cooler # 3221.5650

9/8/16 1325 80

Company: **TETRA TECH**
 Project Contact: **CORDELL RENNER**
 Telephone: **847.913.2904**
 Project Name: **INTERMET/WAGNER**
 Project #: **103X90260001505160403**
 Location: **DECATUR, IL**
 Sampled By: **CR, LM, KS**

CT LABORATORIES

1230 Lange Court, Baraboo, WI 53913
 608-356-2760 Fax 608-356-2766
 www.ctlaboratories.com

Lab Use Only
 Place Header Sticker Here:

121894

Program:

QSM RCRA SDWA NPDES

Solid Waste Other _____

PO #

Report To:

EMAIL: **CORDELL.RENNER@TETRA TECH.COM**Company: **TETRA TECH**Address: **1 S. WACKER DRIVE SUITE 3700
CHICAGO, IL 60606**

Invoice To: *

EMAIL: **CHRIS.BURNS@TETRA TECH.COM**Company: **SAME AS ABOVE**

Address:

*Party listed is responsible for payment of invoice as per CT Laboratories' terms and conditions

Client Special Instructions

SAMPLE IW-60-01 IS PCB OIL, SAMPLED FROM A DRUM THAT CONTAINED AN OLD, LEAKING TRANSFORMER. IW-WO-17 TO 21 WERE COLLECTED IN PCB AREAS.

Matrix:

GW - groundwater SW - surface water WW - wastewater DW - drinking water
 S - soil/sediment SL - sludge A - air M - misc/waste

ANALYSES REQUESTED

Filtered? Y/N

EPA 8082

Total # Containers

Designated MS/MSD

Turnaround Time

Normal RUSH*

Date Needed: _____

Rush analysis requires prior
 CT Laboratories' approval

Surcharges:

24 hr 200%

2-3 days 100%

4-9 days 50%

Collection		Matrix	Grab/ Comp	Sample #	Sample ID Description	Fill in Spaces with Bottles per Test																CT Lab ID # Lab use only	
Date	Time																						
9.7.16	0920	M	GRAB		IW-FB-01	X														1	767 549		
	0925				IW-WO-13	X														1	" 550		
	0930				IW-WO-14	X														1	551		
	0935				IW-WO-15	X														1	552		
	0940				IW-WO-16	X														1	553		
	1000				IW-WO-17 & DUP	X														2	554/555		
	1005				IW-WO-18 & DUP	X														2	556/557		
	1010				IW-WO-19 & DUP	X														2	558/559		
	1015				IW-WO-20 & MS/MSD	X														2	X 76750 557 561		
	1020				IW-WO-21	X														1	767 558 561		
9.7.16	1040	M	GRAB		IW-BO-01	X														1	767 559 562		

Relinquished By:

K. Schult

Date/Time

9.7.16/1700

Received By:

Date/Time

Received by:

Date/Time

Received for Laboratory by:

121894 - Page 92 of 99

Date/Time

9/8/16 1613

Lab Use Only

Ice Present Yes No

Temp 17.2.6 IR Gun 14

Cooler # 3221.5650

9/8/16 1325 85

Company: **TETRA TECH**Project Contact: **CORDELL RENNER**Telephone: **847.913.2904**Project Name: **INTERMET/WAGNER**Project #: **103X90260001S051606403**Location: **DECATUR, IL**Sampled By: **CR, LM, KS****CT LABORATORIES**1230 Lange Court, Baraboo, WI 53913
608-356-2760 Fax 608-356-2766
www.ctlaboratories.comFolder #: **121894**Company: **TETRA TECH**Project: **INTERMET WAGNER CO**Logged By: **JLS PM BM**

m:

RCRA SDWA NPDES

aste Other

Report To:

EMAIL: **CORDELL.RENNER@TETRATECH.COM**Company: **TETRA TECH**Address: **1 S. WACKER DRIVE SUITE 3700
CHICAGO, IL 60606**

Invoice To:

EMAIL: **CHRIS.BURNS@TETRATECH.COM**Company: **SAME AS ABOVE**

Address:

*Party listed is responsible for payment of invoice as per CT Laboratories' terms and conditions

Client Special Instructions

ANALYSES REQUESTED

Turnaround Time

Normal RUSH*

Date Needed:

Rush analysis requires prior
CT Laboratories' approval

Surcharges:

24 hr 200%

2-3 days 100%

4-9 days 50%

Matrix:

GW - groundwater SW - surface water WW - wastewater DW - drinking water
S - soil/sediment SL - sludge A - air M - misc/waste

Filtered? Y/N

EPA 8082

Total # Containers

Designated MS/MSD

Collection		Matrix	Grab/ Comp	Sample #	Sample ID Description	Fill in Spaces with Bottles per Test																CT Lab ID # Lab use only	
Date	Time																						
9.7.16	0820	M	GRAB		IW-WO-01	X												1	767535				
	0825				IW-WO-02	X												1	" 538				
	0830				IW-WO-03	X												1	539				
	0835				IW-WO-04	X												1	540				
	0840				IW-WO-05	X												1	541				
	0845				IW-WO-06	X												1	542				
	0850				IW-WO-07	X												1	543				
	0855				IW-WO-08	X												1	544				
	0900				IW-WO-09	X												1	545				
	0905				IW-WO-10	X												1	546				
	0910				IW-WO-11	X												1	547				
▽	0915	▽	▽		IW-WO-12	X												1	548				

Relinquished By:

Date/Time

9.7.16 / 1700

Received By:

Date/Time

Lab Use Only

Ice Present ☒ Yes ☐ NoTemp 1.9, 2.6 IR Gun 14Cooler # 3221, 5650

Received by:

Date/Time

Received for Laboratory by:

Date/Time

9/8/16 1613

9/8/16 1325 JLS

APPENDIX F
ENVIRONMENTALLY PREFERRED PRACTICES

TDD #:	S05-0001-1606-403
Site Name:	Intermet Wagner Casting Site
Site City, State:	Decatur, Illinois
Site Project Manager:	Cordell Renner
EPA OSC:	Craig Thomas

Environmentally Preferred General Field Practices				
If a general category is not applicable, then check N/A for the category box, not for each subcategory.	N = Not Used	N/A = Not Applicable	Y = Yes Implemented	Comments Section Justify in the comments for each BMP field as to why the practice was not used, not applicable, or implemented.
Energy				
Use of Energy Efficient Equipment				
Computer Equipment (FEMP/Energy Star)			x	
Installation of Electric Service	x			
Reduce Carbon Emissions from Transportation				
Use Internet Based Meetings/Conferences		x		
Maximize Carpooling			x	
Use of Local Labor/Suppliers/Waste Disposal Facilities (50 mile radius)			x	
No idling, except for extreme weather conditions			x	
Use of Alternative Fuels, if available within 10 miles		x		
Properly Inflated Tires			x	
Email Small Files (less than 8MB)			x	
Reusable Electronic Storage Media or the Cloud			x	
Water				
Use of Low Flow Sampling Pumps		x		
Waste				
Use of Local Recycling Programs		x		
Use of Rechargeable Batteries			x	
Recycling – Other			x	
Plastic Reduction			x	
Reuse of Resources		x		
Direct Push Boring		x		
Materials				
Printing when Required				
Double-sided Printing		x		
100% post-consumer recycled paper		x		

TDD #:	S05-0001-1606-403
Site Name:	Intermet Wagner Casting Site
Site City, State:	Decatur, Illinois
Site Project Manager:	Cordell Renner
EPA OSC:	Craig Thomas

Green Metrics		
Metric	Amount	Unit of Measure
Diesel Fuel Used	0	gallons
Distance Traveled ¹	3,700.00	Miles
Unleaded Fuel Used ²	140.68	gallons
Alternative/E-85 Fuel Used	0	gallons
Electricity from Coal	0	kW
Electricity from Natural Gas	0	kW
Electricity from solar/wind	0	kW
Electricity from grid/mix	0	kW
Solid waste reused	0	lbs
Solid waste recycled	0	lbs
Water Used	0	gallons

Greenhouse Gas Emissions (Site Specific)					
Source	Amount Used	Unit of Measure	Methane (CH ₄) (Grams) ³	Nitrous Oxide (N ₂ O) (Grams) ³	Carbon Dioxide (CO ₂) (Kilograms) ³
Gasoline	140.68	gallons	24.42	60.31	1253.46
Diesel	0.00	gallons			
E-85	0.00	gallons			
Electricity Office	0.00	Kilowatts			
Natural Gas	0.00	Therms			
Solid Waste	0.00	lbs			
Other	0.00	Unit of Measure			

Note: 0

¹ Distance traveled based on number of trips between the Internet Wagner site in Decatur, IL , and Tetra Tech's Chicago Office (185 miles) in a large sport utility vehicle, which was required for cargo space. A total of 20 trips were made by 2 Tetra Tech personnel totaling 3700 miles.

² Fuel consumption based on distance traveled in a large sport utility vehicle. An average fuel efficiency of 26.3 miles per gallon was assumed based on 2014 light duty truck fuel efficiency from "Average Fuel Efficiency of U.S. Light Duty Vehicles," U.S. Department of Transportation, Bureau of Statistics Table 4-23 (Accessed online at http://www.rita.dot.gov/bts/sites/rita.dot.gov.bts/files/publications/national_transportation_statistics/html/table_04_23.html on December 9, 2016).

³ Methane and nitrous oxide emissions based on emission factors of 0.0066 and 0.0163 grams per mile for EPA Tier 2 light duty gasoline trucks from "Voluntary Reporting of Greenhouse Gases Program, Fuel Emission Coefficients, Table 5" (Accessed online at <http://205.254.135.7/oiaf/1605/coefficients.html> on December 9, 2016)

⁴ Carbon dioxide emissions based on emission factors of 8.91 kilograms carbon dioxide per gallon of gasoline and 10.15 kilograms carbon dioxide per gallon of diesel fuel from "Voluntary Reporting of Greenhouse Gases Program, Fuel Emission Coefficients, Table 2" (Accessed online at <http://205.254.135.7/oiaf/1605/coefficients.html> on November 14, 2016).

Number of Trips	Distance (miles)	Miles Traveled
		0

Miles Traveled	Fuel Efficiency (mpg)	Gallons of Gas Used
0	26.3	0.00

Environmentally Preferred General Field Practices				
If a general category is not applicable, then check N/A for the category box, not for each subcategory.	N = Not Used	N/A = Not Applicable	Y = Yes Implemented	Comments Section Justify in the comments for each BMP field as to why the practice was not used, not applicable, or implemented.
Land & Ecosystems				
Minimize Disruption to Natural Vegetation		x		
Use of Non-invasive Investigation Techniques		x		
Environmentally Preferred				
Green Procurement				
Environmentally Preferred Vendors			x	
Green Lodging/Hotels			x	
Use of Green Laboratories			x	